

GALAMSEY AS A LIVELIHOOD APPROACH IN GHANA:

From a Poverty Reduction Strategy to a Money-Spinning Business

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DEDICATION

To my father, Nana Baayie Siakwan II and my son, Nana Yaw Baffour Antwi.

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LIST OF ABBREVIATIONS

AWD	Amansie West District
AWDA	Amansie West Development Agenda
ERP	Economic Recovery Programme
FDI	Foreign Direct Investment
GLSS	Ghana Living Standards Survey
GPRS	Ghana Poverty Reduction Strategy
GRA	Ghana Revenue Authority
HIPC	Highly Indebted Poor Countries
IMF	International Monetary Fund
ISSER	Institute of Statistical Social and Economic Research
KATH	Komfo Anokye Teaching Hospital
KPRDS	Kimberley Process Rough Diamond Statistics
MMSD	Mining, Minerals and Sustainable Development
MOFA	Ministry of Food and Agriculture
MOFEP	Ministry of Finance and Economic Planning
MP	Members of Parliament
NCCE	National Commission for Civic Education
NDC	National Democratic Congress

NLC	National Liberation Council
NLC	National Liberation Council
NPP	New Patriotic Party
PMMC	Precious Minerals Marketing Corporation
PNDC	Provisional National Defence Council
SAP	Structural Adjustment Programme
SLA	Sustainable Livelihood Approach
SLF	Sustainable Livelihood Framework
UK	United Kingdom
UN	United Nations
UNCTD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
US\$	United States Dollar

ABSTRACT

One of the most significant multifaceted national challenges in Ghana is the spread of illegal gold mining activities. This type of informal mining is a major source of employment in many parts of a country. This study critically examines the contribution of illegal gold mining on development and poverty reduction in the AWD.

In order to cover a range of livelihood outcomes, the study draws on the concept of sustainable livelihoods (DFID 1997) as an analytical tool to establish a relationship between subsistence mining and livelihood outcomes. However, the existing mining regulations have generated several loopholes in the small-scale sector, which has not only resulted in the spread of illegal mining operations, but also witnessed the massive arrival of Chinese and other foreigners in the activity.

The study through interviews, focus group discussions and observations concludes that small-scale mining can impact positively on community development and poverty alleviation if only a range of challenging requirements are met. The study looks at the current development pertaining in small-scale mining sector and proposes some strategies on how best these we can address these shortcomings.

INTRODUCTION

1.1 Purpose of the Study

This study focuses on the illegal gold mining activities in Ghana. Although several recent studies have highlighted the formal processes of large-scale and small-scale mining in the country, there is increasing recognition that a considerable amount of gold is actually mined illegally, a situation that is widely known in Ghana as ‘*galamsey*’ – a local term coined from the expression “*gather them and sell*”. *Galamsey* is a practice that involves the simplest form of carrying out mineral extraction, which is characterized by extreme labour-intensive procedures, unsafe working environments, and repeated negative human and environmental health impacts (Barning 2002). Thirty per cent of Ghana’s total gold output is derived from the activities of an estimated one million small-scale miners, where most of them are *galamsey* operators who do not hold any form of mining permits (Ghana Chamber of Mines 2002). Although small-scale miners need a license before they can operate, a large part of their mining activities are carried out without any legal permit. The activity, which has kept on attracting several thousands of local Ghanaians, particularly the youth, promises a quicker means of earning an income.

An interesting development to this particular practice of small-scale mining has recently emerged where several hundred of Chinese nationals and other foreign immigrants have increasingly become involved in the *galamsey* activity. When the Ghanaian government decided to curb the actions of both the Chinese miners in June 2013, over 1,500 Chinese were arrested. Within a month, the Ghana Immigration Services had documented a total of 4,592 Chinese, including those arrested had departed the country (The Guardian Newspaper UK, 15 July 2013). Although the operations of the *galamsey* miners have traditionally been regarded

as an illegal activity, successive governments have overlooked its repercussions because large groups of people in the mining communities depend on this sector to enhance their source of livelihood. Due to its subsistence nature, *galamsey* was not as environmentally devastating as is presently the case. With the arrival of the Chinese miners, the activity became heavily mechanized and their scale of operation required a significant amount of mercury usage, which is dumped back in rivers after the gold has been extracted. Both the Chinese and local miners have no legal concessions of their own but operate uncontrollably within the concessions of large-scale mining companies or in areas prohibited for mining such as forest reserves, farmlands and water bodies. These miners are generally disorganised and operate in a '*hit and run*' approach, which often instigate confrontations with both state law enforcement agencies and the security personnel of large-scale mining companies.

The Chinese involvement has brought the public and the government's attention to what is seen as a real national challenge. These new developments have exposed the shortcomings of Ghana's immigration policies, the high level of natural resource corruption and the implementation failures of government policies. At the same time, these new trends have provided increased opportunities for large groups of the rural poor to earn a livelihood.

The overall objective of this study is to assess the impact of *galamsey* operation on community development and poverty reduction in the region. The study will first aim at examining how the mining laws of Ghana are regulated. It will then seek to find out how illegal gold mining affects livelihoods and how the arrival of foreigners transformed the face of the activity. In addition to contributing to the existing body of knowledge, my research findings will help develop and serve as a starting point, for a stronger understanding of the linkages between government policies, natural resource exploitation, large-scale mining companies and local level developmental issues in the country.

There are also some interesting engagements within the illegal gold mining activities that the study aims to highlight. I will examine how and why the numerous conflicts and power relations have often led to violent confrontations. Conflicts between the large-scale mining companies, small-scale licensed miners and *galamsey* operators on land concession issues continue to dominate the mining industry. For example, multi-national mining companies – who are unable to prospect their acquired lands due to fiscal controls or other mechanical shortcomings – have seen their concessions being occupied by illegal miners. Even on concessions that are being actively mined by large-scale operators, *galamsey* operators can easily surround areas not being closely worked. Conflicts on land grabbing issues that exist between local *galamsey* operators and Chinese miners, between local chiefs (who are traditionally the custodians of the land) and land-owners (who are mostly farmers) are also highlighted in this study. Hence, the topic of this thesis has been chosen in order to examine how and why such conflicts arise, strengths and weaknesses of the players, the power interplay between them and the ‘who wins what’.

1.2 Background of the Study

The history of mining parallels that of agriculture as one of the earliest activities of human existence. From ancient times to the present-day, mining has played a significant role in many countries including Ghana. While there are several important factors that explain the relevance of mining as a major contributor to economic development and poverty reduction in the areas they are carried out, there is also an emerging consensus that mining is damaging to socio-economic conditions in most mineral economies. Ross (2001) argues that countries recognised for depending heavily on the mining sectors have higher poverty rates than non-mineral dependent countries. The UNCTAD (2003) also buttress the same claim when it revealed that reliance on mineral extraction has largely been

the cause of rising levels of extreme poverty in countries such as Guinea, Liberia, Niger, DR Congo, Zambia and Sierra Leone. Mining has produced minimal direct benefits for the poor compared to agriculture. The relation between mining and socio-economic development for this reason is evidently not well-defined (UNDP 2003).

Ghana's mineral exploration and mine development has traditionally been dominated and organised by foreign companies, with roughly 10 per cent owned and controlled by the central government. Ghana currently has about three hundred registered small-scale mining groups as compared to the twenty-nine large-scale mining companies and ninety mine support service companies. However, the Minerals Commission Report (2008) indicated that mining leases and exploration rights had been offered to a total of 212 mining companies by the end of 2007, showing that there are far less large-scale corporations than registered small-scale mining companies in the country. This gives an indication that, the small-scale sector is an important part of the country's mining industry. From 1989 to 1999, Ghana's gold production from artisanal and small-scale activities has accounted for an estimated contribution of US\$ 461 million to the national economy (Yakubu 2000).

Although small-scale mining is not precisely identical with illegal mining, the scope of operations of both legal and illegal miners are entwined with each other. Legal small-scale mining exists in Ghana together with large-scale mining, which is regulated by the government. However, illegal mining operates along the methods employed by the legal small-scale industry, but without documented permission. Today, subsistence gold production by illegal miners have become a major source of income for persons living around mining communities, mainly due to the continuous rise of the price of gold on the world market (Nonor 2011). What Nonor (2011) did not highlight was that the activity has not only become a source of income for those living around mines, but it has turned out to be a huge

profit making business for both foreigners and Ghanaians living across the country.

Galamsey activities have continued to exist in the face of government regulations against their operations. These regulations to a larger extent have not been given any stern enforcement over the years. The activities of these miners have become extensively damaging to the environment and also a disincentive to potential foreign investors in the country's large-scale mining sector. However, the activity has continued to become economically resourceful to the several thousands of people engaging in it. This traditional form of subsistence mining for gold was acknowledged as a livelihood measure even before the colonial era. The British colonial rule phased out the activity and made it illegal to engage in gold mining activities at the small-scale level. In the late 1980s when the Ghana government finally decided to legalize the practice, certain challenges such as the process by which mining concessions were issued to the local people were clearly vague. The administrative process, through which licenses were granted became bureaucratically unmanageable and therefore forced many people to engage in mining without the required authorizations. Although, several miners did not start the initial process of acquiring a license, these bureaucratic routes have been pointed out as one of the main reasons why illegal mining continues to spread across regions.

The mining laws of Ghana, which are evident in the legislative act, PNDCL 218 reserve all rights to small-scale mining licenses to Ghanaian citizens. Interestingly, the Chinese miners did not only come into the sector that has been explicitly earmarked for only Ghanaians nationals, but also operated in the area that has long been perceived as illegal, even for the local people. The involvement of the Chinese illegal miners has not only changed the dynamics of *galamsey* operations but also the legal small-scale mining business. The Chinese

Ambassador to Ghana in June 2013 expressed his opinion on how he perceived the role of Chinese miners. He stated that:

The causes of illegal Chinese mining are deeply rooted, and there are many problems that must be tackled at source. These illegal gold miners come from many parts of China, many of them are uneducated farmers and they have never travelled abroad, so how did they know that there are forestry and mining sites in Ghana and why did they come? (Daily Guide Newspaper 20 June 2013).

His insight into the situation raises further questions about who influenced the Chinese miners to engage in an activity explicitly reserved for Ghanaian nationals. The growing numbers of people who are forced to go into *galamsey* in order to maintain or improve their living conditions have compounded what is already a serious national security threat. It was an illegal act largely dominated by Ghanaian youths who, for lack of employment avenues and the desire to ‘get-rich-quick’, resorted to this precarious effort of making a living. The activity used to be carried out with no machine-driven equipment and no presence of foreign expertise. The most common equipment used up until the arrival of the Chinese were basic hand tools such as picks, axes, chisel, sledge hammer, sluice boxes and shovels. Even on occasion where the miners applied the use of advanced machines such as water pumps, explosives materials and mud-washing equipment, their design was elementary for the most part.

1.3 Research Questions

To be able to fully understand and appreciate the range of economic, social, environmental and to some extent the political impacts of illegal gold mining activities on the communities, the study attempts to answer one general question. Three specific questions regarding the mining regulations, livelihoods approach and the impact of the Chinese miners in the region will be discussed.

What is the impact of galamsey operation on community development and poverty reduction in the region?

This general question will examine how illegal gold mining influences development and poverty reduction in the communities that have been occupied by the miners. I will attempt to answer this with the help of the following three interrelated sub-questions:

- ***What characterises the regulations of the mining sector in Ghana?***
- ***What has been the impact of galamsey on the livelihoods of the local people?***
- ***How, and to what extent, has the arrival of the Chinese miners in Ghana changed galamsey activities?***

The above three specific questions will help us examine the extent to which *galamsey* operations have reduced poverty in the region, especially in the AWD where the activity has witnessed huge numbers of both the Chinese and local miners.

1.4 Methodology

This section discusses how the study was carried out. It explains the choice of research methods, data collection and sampling techniques and the tools that were used to carry out the research. The source of data, how interviews and fieldwork were conducted, and the challenges the study encountered are also discussed in this section.

1.4.1 Types and Sources of Data Gathered

Since the study is aimed at assessing the general impact of Chinese and Ghanaian illegal gold mining within a particular district, a qualitative method of data

collection was adopted. Both secondary and primary source of data were used in this study. The secondary sources of data were gathered from published and unpublished works on mining in general, research articles, journals, past theses, newspaper reports, documentaries, radio and television broadcasts. Internet sources including official webpages and archives online became an important part of gathering background information.

The primary data collection method used included personal observations within the mining areas and focus group discussions with the local illegal miners. Interviews with traditional chiefs, opinion leaders, land-owners, farmers, market women, Chinese entrepreneurs, and other key informants who had previously worked with the Chinese in the mining areas were used. Elite interviews were conducted with government officials and various stakeholders. Interview list included the Ashanti Regional Minister, the Kumasi Metropolitan Chief Executive, District Chief Executive Officers, and the Amansie West Member of Parliament, officials at the Precious Mineral Marketing Company, Senior Nursing Officers at Government Hospitals, the Ashanti Regional Director of Education, the Ashanti Regional Police Commander, and Head of Taskforce at the Kumasi Metropolitan Assembly. Radio and television journalists were also interviewed to find out the direct and indirect relationship between the growing levels of illegal mining activities and associated social problems.

1.4.2 Research Design

This study is based on a case-study approach. According to Yin (2003), a case study design is essential when the emphasis of the study is to answer the questions on “*how*” and “*why*” or when one cannot influence the actions and conduct of those in the study. It can be adopted when you want to cover circumstantial situations because you believe they are relevant to the phenomenon under study or when the borders are not clear between the

phenomenon and context. Based on this description, a case study design is ideal over other models as the issues that are explored in this study are rooted in the perspective of the people, particularly the Chinese and the communities involved in the illegal small-scale gold mining.

This nature of the study is purely qualitative research, and data collection techniques consisted mainly of group discussions, unstructured and semi-structured interviews and observations. A qualitative case study ensures that the issues are not explored through a single lens, but rather a variety of lenses, which permits several aspects of the phenomenon to be uncovered and understood. It is an approach to research that simplifies the investigation of a phenomenon within a confined context using a multiplicity of data sources (Baxter and Jack 2008). The choice of this approach is informed by the fact that *“case study designs often favour qualitative methods such as participant observation and interviews”* (Bryman 2008: 53).

One advantage of using a flexible design such as a qualitative case study is that it is based on a range of methods and techniques for generating data. This increases the validity and reliability of the study, as results can be verified and double-checked. One can always check the reliability of interviews, observations, and secondary data from document analysis, media surveys, archives online, newspaper articles and past theses. This enhances the validity and rigour of the work, since different methods can be used to arrive at the same outcomes. The use of different sources of evidence, as well as different data collecting methods, helps to explain and clearly define the outcomes of a research (Ritchie and Lewis 2003).

Using a case-study approach on the activities of *galamsey* miners in the Ashanti region required purposive and snowball sampling methods. The study had to choose respondents from a particular population because of their direct relevance

to the research questions. However, some of the miners at the time of field survey were more concerned about issues surrounding their identity and became reserved about giving information because they felt information released might be used to implicate and persecute them in future.

1.4.3 Interviews and Challenges in the Fieldwork

The study uses interviews as a means of finding answers to the research questions. Typically, interviews are between two people but it can occur with more than two individuals. In the course of the periods from June 29 to August 10 2013, the study conducted 61 interviews in Accra, Kumasi and the Amansie West District, which consisted of 39 males and 22 females.

Table 1. Interview list

Interview Groups	Male	Female	Number of Interviews
Elite (Government Officials, Civil Servants, Chiefs, Media)	13	6	19
<i>Galamsey</i> and Small-Scale Miners	13	4	17
Market Sellers	2	6	8
Chinese Workers in Ghana	7	0	7
Other People Living in the Communities (Farmers)	5	5	10
TOTAL	39	22	61

Table 1 above is a list of the total number of people who were interviewed. I organised two focus group discussions; one with the *galamsey* operators and another a group of school teachers. At Manso Assaming, 7 miners joined the first discussion while 2 farmers, 4 teachers and their head teacher were part of the second group discussion.

I had already anticipated that, the questions raised in this study would meet challenges with purposive sampling since the *galamsey* activity was attracting increased media and government's attention at the time of the field survey. Since I expected most of the miners to be sceptic about giving information, the study also relied on convenient sampling arranged on the willingness of the illegal miners to give out information. Geographically, the study was limited to a typical mining district in the Ashanti region. After considering the seasonal movement of the miners, I decided to study the Manso Nkwanta community, which is the district capital of the Amansie West because the area had miners travelling from other mining districts in Ghana to engage in the activity. Again, I chose Manso Nkwanta because of the high number of Chinese nationals who had arrived to operate as *galamsey* miners in the area.

The toughest challenge I encountered on the fieldwork was getting access to Chinese miners. It was almost impossible to interview them as they were now conscious of their activity and had become much more withdrawn and reluctant to discuss anything concerning their operations. Although there were some Chinese miners cautiously but actively operating, most of them had packed their possessions and were ready to leave these mining areas at the time of the field survey. With the exception of a few Chinese nationals engaging in different ventures other than gold mining, interviews could only be conducted with the local Ghanaian miners who had previously worked for the Chinese. Some of the issues raised by the local miners with regards to the Chinese invasion were more speculative than factual.

Another challenge encountered in the field was conducting elite interviews. The period in which the fieldwork was undertaken coincided with the introduction of the government security taskforce, which had been formed to address the issues concerning *galamsey* operations. I was at times redirected to the office of the taskforce when questions about the activity were posed to officials who as you would expect had solid knowledge about *galamsey*. With the limited time I had, this made it extremely difficult finding the right offices and conducting interviews. However, I managed to get more interviews done during the last two weeks of the fieldwork. Most of them admitted to their lack of in-depth information about the activities of *galamsey* operators.

1.5 Profile of the Amansie West Study Area

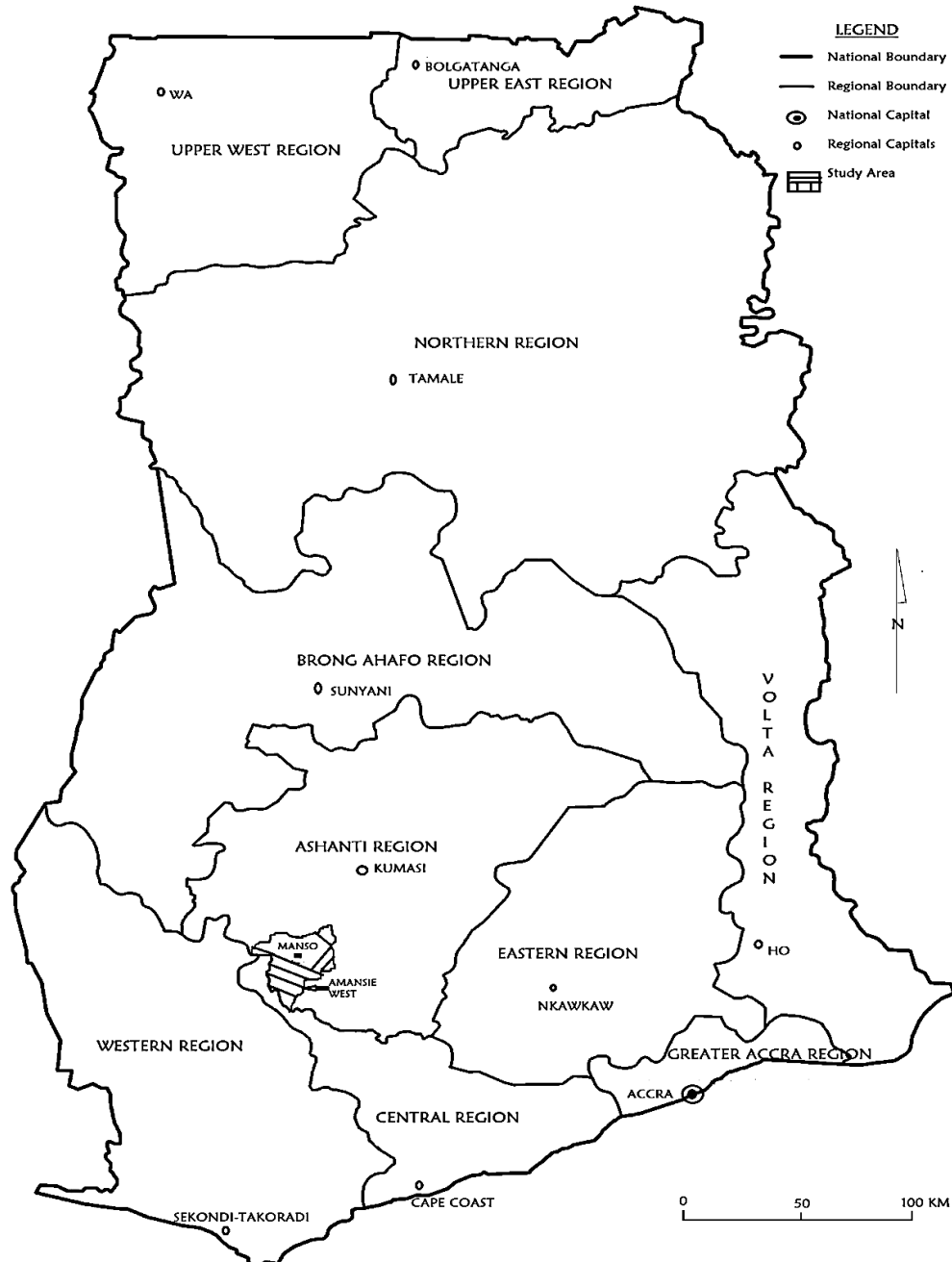
This section of the chapter gives a description of the profile of the Amansie West District (AWD) where there have been a high number of illegal miners engaging in small-scale mining. I will take into consideration the location and size, conditions of built and the natural environment, population characteristics and the spatial issues of the district. Most of the data gathered on the district's profile was from secondary sources.

1.5.1 Location and Size

The AWD was formed out of the former Amansie District in 1988. The district presently spans an area of about 1,364 square kilometres, making it one of the largest districts in Ashanti Region. Manso Nkwanta is the district capital, which is located about 65 kilometres from Kumasi. The vast arable land area of the district has given access to farmlands for promotion of rice, citronella, cocoa, oranges and oil palm plantations to feed the local agro based industries and beyond. The drainage pattern of the district, which includes the Offin and Oda

rivers, can be harnessed for irrigational cultivation of rice and vegetable farming (Ministry of Food and Agriculture 2010).

Figure 1. The Study Area in Regional and National Contexts



Map 1 shows the study area where small-scale mining is predominant. The location of the district makes it the gate way to the Ashanti region from Western and Central Regions of Ghana. This has a great potential for promoting hospitality industries such as hotels, restaurants and crafts products.

1.5.2 Mineral Deposits

Among the resources identified in the district are potentially rich mineral deposits. The entire District is rich in gold deposits and mining has emerged as the most important economic activity in the communities. Mining companies have acquired almost all the remaining land area in the District for either prospecting or actual mining (Ministry of Food and Agriculture 2010). There are however other areas in the district with gold deposits, which have not been acquired. One such area is the gold deposits in the Jeni Bonte River where there are about 21 million cubic meters of soil containing roughly 5 million grams of gold. Apart from the companies with large concessions in the district, there are other interested parties in the mining industry. The activities of small-scale miners, mostly *galamsey* operators who employ very crude methods to mine for gold are continually increasing in the district. The activities of these various groups are not properly regulated and not well organised as part of a total package development effort even though it goes a long way to alleviate the poverty situation in the district (MVP 2008).

1.5.3 Conditions of the Natural Environment

The natural environment of the District, which is one of the least polluted areas in the Ashanti region, is increasingly losing its reputation for purity. This has been attributed to the surging population size and the problems associated with it. The District can boast of natural environment ranging from forest reserves with rich classes of vegetation and wildlife to vast arable land that can support the production of both staple crops and cash crops. Chain-saw operators and some timber contractors are encroaching on the reserves at an alarming rate that it is projected that the reserves will lose its value in the next couple of years if measures against such actions are not taken (AWDP 2008).

In Ghana, the essential oil derive is largely used as perfume for soap manufacturing and as an active ingredient in anti-fungal ointment. The Amansie Resolute Limited as part of its social responsibilities and environmental sustainability built the capacity of the rural population to cultivate the plant. There is therefore the need to overhaul and sustain the interest in the cultivation and processing of the citronella plant so as to protect the environment from the actions of *galamsey* activities and chain-saw operators and further to fuel the local economy through its numerous value chain developments (AWDP 2008).

Figure 2. The Amansie West District



Source: Modified from the AWDP (2008) KNUST Library, 08.08.2013

Figure 2 is a map of the Amansie West showing the major towns and Manso Nkwanta, which is the district capital.

1.5.4 Socio-Economic Profile of the District

Agriculture continues to be the district's main economic activity, employing about 60 - 70 per cent of the total workforce. The service sector, which is gradually becoming Ghana's most important area in terms of employment avenues, accounts for a low 8 per cent in the district while 22 per cent of the labour force is engaged in the manufacturing sector. The arable nature of the lands in the district has made farming an important part of the economic activities within the district. Agricultural output is solely dependent on the availability of rain. Women constitute about 60 per cent of the total population of the area where most of them are engaged in subsistence farming. Agricultural crops commonly grown by farmers on a survival level include maize, plantain, cassava and cocoyam. The few commercial farmers are mainly cocoa farmers. The lack of storage facilities and the deprived nature of the roads linking the district to the main regional market have resulted in the low earnings farmers receive for their seasonal agricultural harvest (AWDP 2005).

Mining, which looks more profitable, has been the pull factor for most of the people who find themselves unemployed. It is the second most significant contributor to the district's economy. Gold mining dates back to pre-colonial rule and the district served as a major source of subsistence gold production to the Ashanti Kingdom. Both large-scale and *galamsey* mining activities currently accounts for 22 per cent of the work force where majority of them are men. The district's main source of revenue generation came through mineral and timber royalties. Royalties alone contributes 80 per cent of the total revenue for the district. However, postponements of mineral royalties from the government have slowed the district's development plans (AWDP 2012).

Major development projects that the district ought to undertake are seriously hindered as a result of the undependable nature of its source of revenue. The

average annual income per person in the district is estimated to be about US\$ 230. The major source of household income in the district basically came from agriculture and non-agricultural activities such as commerce, trade and illegal gold mining. Families also relied heavily on remittances abroad to support themselves. Over 70 per cent of households are considered to be living below the poverty line of less than US\$ 1 a day (AWDP 2010).

1.6 General Overview of the Thesis

The thesis is structured and presented in six chapters, each of which confronts comprehensive topics relevant to the thesis.

Chapter 1 is the introductory chapter, which gives a background to the study and why this study is important. The research questions, objectives of the thesis and rationale for the choice of topic have been discussed in this chapter. It introduces the study region, as well as describes the study area and the data collection techniques used.

In Chapter 2, provides a detailed account of the theoretical perspective central to this study. At this point, the study use concepts from the sustainable livelihoods approach. The study uses the Sustainable Livelihood Framework (SLF) as an analytical tool to describe and explain the relationship between the risk and reward in the illegal gold mining activity, politics and local-level development, and the power relations between all interested parties in the activity.

Chapter 3 gives a profile of the country Ghana, covering issues such as political, socio-economic and the types of poverty reduction strategies that have been adopted over time. The chapter then touches on Ghana's extractive industries, the history of gold mining and other countries, and what lessons could be learned

from it in terms of governance and local content development. China's relationship with Ghana is also discussed in this chapter.

Chapter 4 examines and analyses the first of three research questions posed in chapter one and attempts to answer it; *what characterises the regulations of the mining sector in Ghana?* The study looks at various mining regulations Ghana's and how it has influenced the mining sector in general

Chapter 5 looks at the two remaining specific questions. The finding in this chapter will particularly provide an assessment on how *galamsey* has affected community development and poverty reduction by basing on the livelihood outcomes that result from the activity. The second question discusses the impact of the arrival of the Chinese.

Chapter 6 finally sums up the research questions and reflects on the theoretical model the study applied and tries to find out if the approach used fits or not. It discusses some of the major findings of the thesis and gives recommendations on what has to be done and the way forward.

2. THEORITICAL PERSPECTIVES

Raising crops and livestock for food and for sale, working in a safe environment for a decent wage, setting up micro-enterprises and fishing in clean waters – these are the basic requirements for poor men and women seeking to improve their lives (Oxfam 2010:48).

2.1 Introduction

This chapter gives a detailed description of the livelihoods approach used in addressing the research questions posed in chapter one. I will begin this chapter by defining the term livelihood and then modify the DFID version of the livelihoods framework to suit the findings of my study. Towards the end of this chapter, this study will operationalise the research questions posed in chapter one and choose the theoretical perspective that will unlock them.

Referring to the Oxfam quote above, one would be tempted to relate farming and fishing as the most straightforward way of improving the lives of the poor, however, in Ghana, subsistence mining through unregulated means in Ghana has become one of the most important forms of seeking a livelihood. The study will adopt the Sustainable Livelihood Approach (SLA) to reinforce how illegal gold mining activities is a coping strategy in Ghana's mining communities. This is based on the fact that the livelihood approach is an interesting strategy in the area of poverty reduction and offers a way to improve the lives of people who are entangled in poverty related issues. With 70 per cent of the world's poor living in rural areas, the target set by the British Department of International Development (DFID) in reducing the proportion of people living in extreme poverty by halve can be achieved if they address the poverty issue concerning people living in rural areas. The SLA is a way of understanding the coping strategies of people especially the rural poor. It takes into account the key features that impact the

livelihoods of people and the common linkages between the features. These features include a framework that helps in understanding the difficulties of poverty and a set of values to guide actions to address and overcome poverty. The approach can serve as a channel for working out measures that will improve the lives of the rural poor while attempting to understand the issue of poverty from their perspective. The UNDP and other NGO's such as CARE and Oxfam have in one way or the other used models in sustainable livelihoods to implement development programs.

2.2 Defining Livelihood

The Oxford Dictionary (2010) defines livelihood as a “*means of securing the necessities of life*”. For instance, an illegal miner's livelihood depends on the availability and accessibility of gold in a particular area. Several other authors have defined the notion of livelihood. The works of Robert Chambers in the mid-1980s pushed thoughts on livelihood into the spotlight. The idea behind livelihoods was to improve development and eliminate poverty in poorer countries. In 1997, the DFID built on Chambers concept and introduced the SLA. The goal of the DFID was to put focus on a policy that would target halving the number of people living on less than US\$1 a day by 2015. It must be stressed that, defining what is livelihood in any specific situation will continually open up a debate.

The following definitions capture a broad notion of how livelihood is understood. One of the most well-known definitions of livelihood was offered by Chambers and Conway (1992: 8), according to whom;

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.

This definition attempts to connect how sustainability can be achieved when one secures a livelihood. Ian Scoones (1998: 5) offered a revised definition of sustainable livelihood, which was less demanding and more realistic:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets, while not undermining the natural resource base.

Ashley and Carney (1999: 1) definition stressed more on sustainability and poverty reduction through setting out the main concern for people living in poverty. They defined sustainable livelihood as “*a way of thinking about the objectives, scope and priorities for development, in order to enhance progress in poverty elimination.*”

Ellis (1998: 2) built on Chambers and Conway’s (1992) concept of livelihood and offered a similar definition when he stated that:

A livelihood is defined as the activities, the assets (natural, physical, human, social and financial capital), and the access (facilitated by institutions and social relations) that jointly determine the living gained by an individual or household.

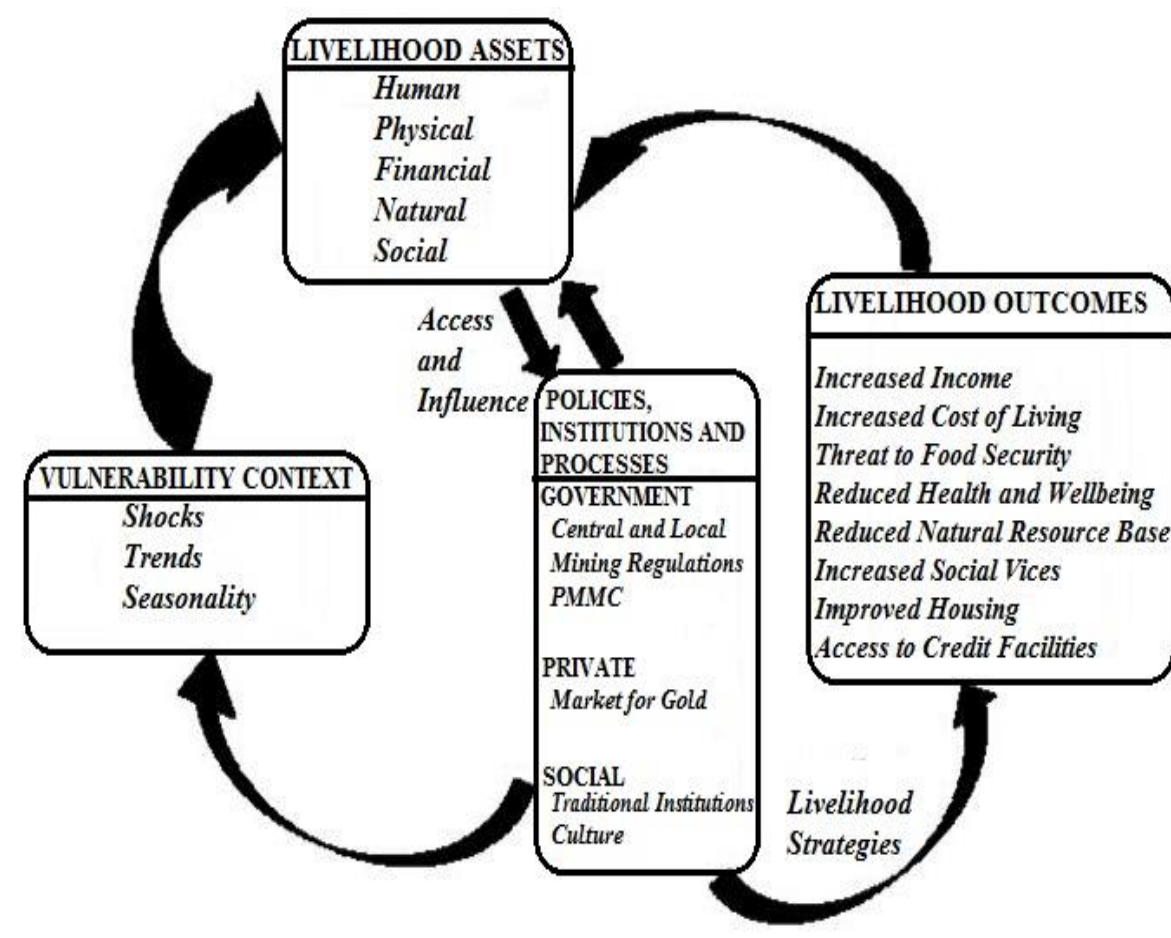
However, Scoones’ definition put more focus on the established ways of assessing livelihood outcomes, where matters related to work and employment are linked with poverty reduction with wider concerns of sufficiency, security, health and know-how. In this study, I will draw on the definition put up by

Scoones (1998) to discuss the general impact of *galamsey* activities on community development and poverty reduction.

2.3 The Sustainable Livelihood Framework

The DFID after being tasked with developing an analytical tool to help understand poverty and find strategies to poverty reduction in rural communities designed the Sustainable Livelihood Framework (SLF). I will adopt the SLF illustrated by DFID (1997) to discuss how particularly transforming structures in levels of government and institutional processes have impacted small-scale mining in Ghana.

Figure 3. The DFID Sustainable Livelihood Framework



Source: Modified from the Carney (1998)

The diagram (figure 3) is a modified version of the DFID framework that best suits the livelihood situation in the study area. It shows there are five different components of the SLF. These include vulnerability context, livelihood assets, institutions and processes, livelihood strategies and livelihood outcomes. The SLF relates to this study in several other ways. I will use the notion of asset-based livelihoods in terms of material and social resources, which were evident in the mining communities to address how it influences livelihood strategies. The study will establish the vulnerability context, which the DFID used in its framework to illustrate how shocks, trends and seasonality affect livelihood strategies. I will then move on with how transforming structures either on the part of government or private sector have impacted the mining industry both

positively and negatively and processes through which laws and policies, culture and institutions are established and regulated to influence livelihood outcomes for small-scale mining communities. Although mining is seemingly a major livelihood approach, I will assess other livelihood strategies adopted by those living in these areas and how these strategies would shape the livelihood outcomes such as increased income and well-being, reduced vulnerability, improved food security and a more sustainable use of natural resource base.

2.4 Livelihood Assets

The concept of asset-based livelihood has led to the development of several approaches in reducing poverty. The SLA tries to expand the notion that different households have different access to livelihood assets. This demonstrates how factors that impede or enhance livelihood opportunities are linked to each other. The livelihood assets, which principally constitute the entry point of the SLF are the capital assets that can be accessed, controlled, and used by the poor (Serrat 2008). These capital assets include human, social, natural, physical and financial resources as shown in figure 3.

Capitals such as natural and human are readily available to the poor but social and financial capital are seen as the difficult to reach. Depending on the priorities of households, some of the capital is clearly important than others. Some households may consider housing and land as important, while others may prefer to make use of various types of social networks.

Human Capital: According to Serrat (2008), these include health, nutrition, education, knowledge and skills, capacity to work and adapt. The state provides channels for education and health. It is the physical labour that exists for any particular household can use and this is seen as the most readily available capital asset the poor can own (Carney 1998). Human capital, as emphasized by Ellis

(2000: 33), is the most important of all livelihood assets possessed by the poor in their own labour. In the mining communities, physical labour was the *galamsey* operator's most important asset but their health status and nutritional intake had a direct impact on them. Several open pits with stagnant water were breeding grounds for mosquitoes.

The prevalence of malaria among people living close to mining lands was evident. Most often, tuberculosis, respirator and other water-borne diseases coupled with inadequate health facilities impeded the miners' progress. Miners' ability to enhance their well-being was the most worrying factor. Nutritional issues were not much of a worry for the miners but it was problematic for the communities in general. The miners are able to afford to overly priced foodstuffs in the communities market. Level of education, knowledge and skills did not influence ranking among miners when it came to sharing of proceeds but the capacity to work either with a group was a decisive factor. Skills and experience was central in situations where miners operate on their own.

Natural Capital: Ellis (2000: 8) defined it as a natural resource base, which yields products used by human beings for their survival. The value of natural capital increases when human capital is applied to land and produce, water and aquatic resources, trees and forest products, wildlife and biodiversity or environmental services. In this case, the sale of raw gold by the miners has much lower value than the refined gold. People living in rural areas rely on the natural capital to earn a livelihood but the activities of the small-scale miners had negative impact on the natural capital. For instance, surrounding water bodies were polluted, forests were cleared and land became infertile for any farming activities.

Carney (1999) points out that rural areas accounted for 70 per cent of the world's people who live in extreme poverty. Natural resources are primarily what they depend on to generate an income. These resources consist of both renewable

(resources that can be replenished) and non-renewable (resources that cannot be replaced once they are used up). Farmlands will be considered renewable while minerals will be seen as non-renewable resource.

Social Capital: Serrat (2008) emphasized on social capital as networks and connections that the rural poor establish in order to support each other. They build relations of trust and mutual understanding by creating formal and informal groups with common rules and sanctions. It is predominant among the rural poor to have collective representation and take part in decision-making although they pursue different livelihood strategies (Scoones 1998).

The mining communities in general had well-established networks within extended families and clans. However, there exist some level of obscure balance of authority between traditional chiefs and head of family clans. The communities depend on the leadership of their traditional institutions to establish connection with government authority. Among the miners themselves, trust and mutual assistance was not as strong as the group of farmers.

Physical Capital: This capital comes in the form of infrastructure, which includes roads, vehicles, housing, water supply, sanitation, energy, communication, tools, technology and equipment for production. They are the assets that are made available to enhance social and economic activities (Ellis 2000). In the study area, most of the physical capital came in the form of four-wheel vehicles, power generators, and stone cracking machines. Household relied on the use of mobile phones as a communication tool. Roads were in deplorable state at the time of the field survey.

Financial Capital: According the Scoones (1998), this is essential for the pursuit of any livelihood strategy and it comprises all income available to a household. This includes savings, credit and debt, remittances, pensions and wages. The emergence and rapid growth of micro-finance companies have provided credit

facilities for the rural poor in Ghana. These small and medium-size financial firms had established offices in the mining areas. There are other traditional sources of financial capital such as credit unions, which is an important source of getting capital among women living in rural areas.

2.5 Vulnerability Context

According to Serrat (2008: 3) vulnerability is characterized as insecurity in the well-being of individuals, households, and communities in the face of changes in their external environment. The influence of external factors is such that people move in and out of poverty as a result of their inability to cope with the three components of the vulnerability concept; shocks, seasonality, and critical trends. Floods, drought, diseases and conflict are all part of the external side of shocks in the mining communities. Seasonality is characterized by prices and employment opportunities. They are exposed to changes in the world market gold prices. People are lured to engage in the activity by the rising prices. The work of a *galamsey* operator is vastly periodic as rainy seasons impede their operations and dry seasons enhance it. However, the crude methods they employ to win gold requires their work to be dependent on water.

2.6 Institutions, Policies and Processes

The outcome of the livelihood approaches is not only influenced or limited by the vulnerability context availability and the use of all the capital resources. Serrat (2008) pointed out that livelihood strategies and outcomes can also be changed by structures and processes that have been put in place. Structures are the government and private sector establishments that regulate and implement policy and legislation, deliver service and operate all forms of other function that impacts on livelihoods. Social processes are embedded in the laws, policies, local

and traditional institutional, cultural norms and practices, which in a way guides the manner the government and private sector operates the structures. Societal norms and ritual beliefs have a huge impact on how the mining communities adopt their livelihood strategies.

2.7 Livelihood Strategies and Outcomes

The livelihood outcome any given household achieves is as a result of the livelihood strategies adopted. Approaches to realizing livelihood outcomes can be natural or non-natural resource based activities, remittances abroad, pension and other poverty alleviation schemes. As shown in figure 2, more income, increased well-being, reduced vulnerability, improved food security and more sustainable use of the natural resource base are some of the possible livelihood outcomes. Small-scale mining could result in more income but it is a threat to food security. It involves the use of a non-renewable natural resource and that in effect is not sustainable.

2.8 Importance of the Livelihood Approach to Mining

The objective of the livelihood approach was to integrate the rural poor into development programmes and policy making. There was the need for development experts to think outside the box and do away with the traditional forms of identifying problems and implementing solutions. It is important to identify what assets people possess and what capital they do not. This is to make sure formal and informal institutional frameworks are incorporated when deciding on what is poverty to the poor. The SLA gives room for development thinkers to merge indigenous knowledge into policies and programmes that alleviate poverty. Their ability to merge capital assets with the external factors in creating a livelihood would go a long way to reduce rural poverty. Although this

study focused on small-scale miners, some of the respondents were farmers, hunters, petty traders, taxi drivers, market women and students as they fell within the poverty line.

The World Bank and the United Nation Development Programme (UNDP) reported in 2005 that out of the 1.1 billion people living under extreme poverty (less than US\$ 1 per day), sub-Sahara Africa alone accounted for a little over 300 million with majority of the numbers recorded in Asia. However, Africa's progress towards poverty reduction has dawdled compared to their Asian counterparts, notably China and India. While most Asian countries are making remarkable progress in poverty and development concerns, the percentage of people living in extreme poverty in sub-Sahara Africa raised to 46.4 per cent in 2001 from 41.6 per cent in 1981.

The situation is quite surprising when one considers all the years spent on making concrete efforts towards the eradication of poverty. The failure in addressing the issue of poverty especially in the rural areas calls for a change in development strategies in a direction that incorporate the needs of the rural poor. Mining has over the years become a means to securing a livelihood in most African countries. The situation is every evident in Zimbabwe where Taylor (1998) notes that artisanal small scale gold mining is seemingly one of the few coping strategies employed by Zimbabweans to control, tolerate or minimize the adverse effects of economic hardships. Artisanal small-scale gold mining therefore serves as a source of livelihood as it has become the major source of cash income.

2.9 Operationalisation

In this study, I will outline the tools and process that will answer the three specific questions. The objective of this study is to examine the impact of

galamsey operation on community development and poverty reduction in the region. I will adopt some features of the modified DFID framework from figure 1. The study will use the shocks and seasonality factors in the vulnerability context. Some of the livelihood assets in the DFID framework are key elements in what the study intends to find out. For example, the human and natural capitals are the most important assets that directly influence the activities of *galamsey* operators.

Structures that can transform subsistence mining as a livelihood strategy has more to do with the influence of the private sector rather than the levels of government. *Galamsey* activities exist with or without government decisions. However, the study will adopt all the processes laid out by the adjusted DFID framework in answering the three specific questions. Laws, policies, culture and institutions are key elements of the outcome of the livelihood strategy. In order to assess the impact of *galamsey* operation on community development and poverty reduction in the region, there is the need to find out what kind of information the study plan to use in answering the 3 specific questions.

2.9.1 What characterises the regulations of the mining sector in Ghana?

Galamsey operations have been increasing tremendously in recent years despite the practical difficulties and reformed legal organisation of the small-scale mining sector. Several hundreds of gold mining activities around the region continue to operate illegally in the face of the various attempts made by the government with imposing regulations. In order to know why people are engaging in illegal mining, one has to understand the politics of the legal process of mining. This study will first attempt to explain the mineral and mining laws surrounding both the large and small-scale mining industry. It will then seek to find out and analyse the strategies adapted by the government in addressing the situation. It will also attempt to find out what challenges the government faces in addressing the associated environmental and socio-political problems linked to

the activity. This question is for those in high-ranking positions at the Ministry of Mines, Mineral's Commission, the Precious Mineral Marketing Company and traditional institutions. An interview was setup with a criminal lawyer to discuss some features of the mining regulations in Ghana.

2.9.2 What has been the impact of galamsey on the livelihoods of the local people?

The activity has gained prominence over the last couple of years as the biggest local sub-sector generating enough income for the local people in the Manso area (AWDA 2012). Here, it is important that the study assess how *galamsey* has affected local level development of the whole community in terms of income, consumption, food security, natural resource base, health and well-being, access to financial credit and social vices. How the activity has affected livelihoods will aid in understanding why people engage in the activity and why they choose the rewards over the risks elements associated with it. The study tries to find out if the spread of illegal gold mining has reduced the poverty levels among the local people living in these communities. Another unique factor was the incredible number of women and children connected to the *galamsey* operations in the district. The study tries to find out if the increased women and children in the activity have a direct link with social problems in a particular community. Interviews were conducted with all the chains of command in *galamsey* operations. Other interviewees included market women, children in *galamsey*, taxi drivers, and civil servants living in the community.

2.9.3 How, and to what extent, has the arrival of the Chinese miners in Ghana changed galamsey activities?

The arrival of the Chinese miners has changed the entire appearance of the activity. It is no longer a poverty-driven activity but has rather turned out to be a huge business venture with the potential of reaping significant returns. The study

will find out how and why the Chinese miners got involved in the activity. I will then examine how the arrival and introduction of the Chinese has affected the *galamsey* operation and assess whether government handling of the situation will have any impact on the Ghana and China economic and diplomatic relations. Interviews with the Chinese miners were not possible at the time of the fieldwork because of the government's crackdown on these miners. Data from this question was gathered from Chinese nationals engaging in other ventures and local miners who used to work with the Chinese. The discussions with the elite interviews did not only focus on the mining regulations, but also the impact of the Chinese miners.

3. GHANA IN CONTEXT

3.1 Introduction

Chapter three will critically put Ghana in focus by looking at the political history as well as the economic situation and the poverty reduction strategies adopted by the country. I will then examine the mining history of Ghana and highlight on China's relationship with Ghana and how it has impacted on the country's extractive industries especially in the field of gold mining. I will also review the benefits and challenges posed by the China-Ghana relationship and lessons from other countries will be drawn into the Ghanaian context. I begin with a brief introduction to the political and economic history of Ghana.

Ghana is a sub-Saharan African country bordered to south by the Gulf of Guinea and Atlantic Ocean, to the north by Burkina Faso, east by Togo and west by La Cote d'Ivoire. The Statistical Service after the 2010 population census indicated that Ghana's total population is 24.2 million, with 12.4 million females and 11.8 million males. Ghana lies in close proximity to the equator and it is perhaps the closest country to the centre of the world. The total area of the size of Ghana is 238,535 square kilometres with a coast, which stretches 560 kilometres wide. Castles, forts, ports and harbours are spread along the coast. There are ten administrative regions in the country with Accra as the capital city.

3.2 The Political History of Ghana

Ghana before independence was known as the Gold Coast. On 6th March 1957, Ghana became the first country in sub-Saharan Africa to attain independence and elected Dr. Kwame Nkrumah as its Prime Minister. The country then pushed further to become a republic on 1st July 1960 making Nkrumah the first president

of Ghana. After becoming a republic, a constitutional referendum in January 1964 moved the country from a multi-party system to a one-party state and Kwame Nkrumah was vested all executive powers as he was deemed as 'president for life' for both the nation and his Convention People's Party.

On 24th February 1966, the country experienced the first of several series of government revolutions organised by the military when Kwame Nkrumah was overthrown and Lt. General Joseph Ankrah and Emmanuel Kwasi Kotoka lead the National Liberation Council (NLC) to take over the realms of the country. After other series of political turmoil involving the military, the country enjoyed brief democratic governance in 1979 before Jerry John Rawlings took over the administration of Ghana in a 31st December 1981 coup. Under the military rule of Jerry Rawlings, Ghana achieved some level of undemocratic political stability and then progressively went into constitutional rule in 1992 bringing back the multi-party system (Ghanaweb 2014).

In the December 2000 general election, political power was handed over to the biggest opposition party, the New Patriotic Party (NPP) led by John Kufour. Ghana's democracy gained international recognition in the December 2008 elections when John Atta Mills on the ticket of the opposition National Democratic Congress (NDC) won the majority of votes after two rounds of voting in an election, which saw the incumbent NPP narrowly losing the run-off with 49.9 per cent of total vote cast (Gyimah-Boadi 2009). Uncharacteristic of several other African states, the then ruling NPP government relinquished power to John Atta Mills of the NDC and this move placed Ghana as a beacon of hope for democratic transitions in African politics.

3.3 The Economy of Ghana

Ghana has over the years depended on the primary sector with agriculture, mining, fishing and, forestry as the mainstay of the economy. Agriculture has been such an important part of Ghana's economy for several years as it employs about 60 per cent of the total workforce and accounts for 37 per cent of GDP (Ghanaweb 2014). The extraction of oil and gas has recently become an important part of the primary sector of the economy, which makes direct use of natural resources. Although Ghana's export earnings has been traditionally and mainly based on gold and cocoa, a rising service sector now account for over 50 per cent of the country's productivity.

The 2008 Budgetary released by the Ministry of Finance on the state of Ghana's economy was quite remarkable. The GDP of the country had increased from 3.7 per cent in 2000, 6.3 per cent in 2007, and to 8.4 per cent in 2008. Inflation had drastically decreased from 40.5 per cent in 2000 to 10 per cent in 2007 and took a stumble from the impact of the global economic crisis in 2008 by rising to 16 per cent (Ministry of Finance and Economic Planning 2008). By 2010, inflation had dropped to 8.7 per cent and the World Bank figures on Ghana's GDP sited an 8 per cent growth rate in 2010 and a staggering 15 per cent in 2011.

Most African states have seen Ghana out shinning them on measures of political stability, civil society independence and economic positioning. Ghana has turned out to be a desirable opportunity to foreign investors with its consolidated democracy, alluring prospect in the oil discovery and a sustained economic growth of 8 per cent (IMF 2013, African Economic Outlook 2012). The current economic state of the country has been one with resourceful opportunities. It is Africa's second largest gold producer, an emerging key player in oil and gas production and also the world's second largest producer of cocoa. The strength of Ghana's economy lies in its substantial natural resources, closeness to large

market base such as Nigeria and the unique political stability, which has kept growing since 1992. The political turmoil in neighbouring countries has also seen Ghana becoming a West African port hub for land-lock countries such as Burkina Faso and Mali.

However, the country's failure to address certain vulnerabilities remains a threat to the economy. Primary commodities have kept dominating export earnings, making it vulnerable to price instability and demand uncertainties from external markets. Ghana's ability to provide reliable supply of energy and affordable credit to medium and small-scale enterprises remains central to infrastructural development and economic growth. Another short-term weakness, which poses a crucial threat to Ghana's progress in advancing middle-income status, is how to address the wage pressure from the new salary policy implementation causing higher public spending and the declining value of the cedi against major international currencies such as the US dollar, Euro and UK pounds sterling (World Bank 2013).

3.4 Ghana's Poverty Reduction Strategies

Ghana's economy has for several decades faced the persistent balance of payments deficits and continual spells of high inflation in spite of the many economic reforms adopted. One of the many reforms adopted was the Structural Adjustment Programme (SAP) in the mid-1980s and early 1990s. It was an economic recovery program launched in 1983 with the aim of reversing the declining economy, which had been characterised by lax financial management and absurd inflation rates, which rose as high as 142 per cent. Although inflation was reduced to 10 per cent in 1991 as a result of the SAP (IMF 2001), the programme failed to address the economic problems that were facing the country. The consequences of the recovery program have been felt since the 1990s where the economy has only managed minimal growth.

The IMF (2006) report on the country estimated that between 60 to 90 per cent of Ghana's development expenditure was funded by foreign loans and aid. Ghana became exceedingly dependent on foreign aid and was trapped in a rising debt. The situation pushed the government in 2001 to join the Highly Indebted Poor Countries (HIPC) with the intention of seeking external debts relief and see how it will impact on an imminent poverty reduction strategy. It must be noted, however, that the public's opinion on the President John Kufour administration's decision to join HIPC was negative as most people did not want the country to be tagged as a poor one. After joining HIPC, the country brought up economic programmes called the Ghana Poverty Reduction Strategy (GPRS I) and the Growth and Poverty Reduction Strategy (GPRS II). While the focus of GPRS I was on reducing poverty levels among Ghanaians, the GPRS II laid emphasis on policies that were capable of supporting wealth creation and sustaining the achievements of GPRS I. All of Ghana's economic reforms were adopted with the aim of reducing poverty through an accelerated growth, investing in human resource and executing direct poverty alleviation measures (IMF 2001).

However, these reforms according to the Bank of Ghana report in 2005 faced repeated challenges. Ghana's economy was again overly dependent on the export earnings from gold, cocoa and a few primary commodities making it vulnerable to price fluctuations. Secondly, the country was not able to tackle the poor social structures, which were evident in the low level of education, lack of skilled labour, high dependency ration and persistent corruption. The Ghana Living Standards Survey (2006) brought up impressive numbers as it stated that the number of Ghanaians living below the national poverty line had fallen from 52 per cent in 1992 to 28.5 per cent in 2006. However there is a wide inequality gap across the regions with the highest incidence of poverty recorded in the three Northern regions of Ghana.

3.5 The Extractive Industries and Ghana

In 1983, when Ghana designed and implemented the Economic Recovery Programme, the mining sector was put in the spotlight because of its massive potential and key role in the economy. Short and long-term objectives were set to re-establish the sinking industry and gold production remained critical to the 'new Ghana' economy after the SAP. The extractive industries of Ghana have over the years been the country's largest source of foreign exchange earnings particularly gold, diamonds, manganese ore and bauxite but agriculture has continued to be the mainstay of the Ghanaian economy.

Ghana has been the second largest producer of gold in Africa for several years, the third largest aluminium metal and manganese ore producer in African. The country is also a key player in the production of diamond and bauxite (Coakley 1999). It is ranked 13th among the world's leading producers of diamond in terms of volume (Kimberley Process Rough Diamond Statistics 2011). The discovery of oil and gas in commercial quantities in 2007 and dramatic changes in mining regulations have seen the extractive industries in the country become an important part of the economy. Salt is also produced along the coastal areas of the country mostly in Ada, Elmina and Apam. Ghana possesses one of the largest proven renewable solar salt productions along its entire coastline. This stretches across a distance of over 500km and could become the supply hub of West African countries when effectively mined (Mining Journal of Ghana 2011).

3.6 Present Role of the Mining Sector in Ghana

The mining sector is without a doubt a crucial area for many people living, working and investing in Ghana. If fully developed, it has the potential to build a solid and prosperous economy as it has shown down the years to be the sector with the biggest contribution. The sector averaged 42 per cent of Ghana's entire

commodities export and has been the country's largest export earnings from 1991 to date, except in 2004 when earnings from cocoa were higher. In 2008, the mining sector brought in US\$ 2.34 billion of the US\$ 5.2 billion total export earnings and gold alone accounted for 95 per cent of total mining contribution with a whopping US\$ 2.2 billion. This has reinforced the mining sector as the country's biggest foreign exchange earner. The sector has contributed an average of 5.5 per cent GDP from 2000 to 2008, which is a vast improvement from the contributions in the 1980s where it was as low as 1 per cent. Taxes are a major part of government income, which accounts for 40 per cent of total revenue collected by the Ghana Revenue Authority (GRA).

Every year, mining companies alone contribute over 12 per cent of such government revenue, which comes in the shape of income taxes and royalties. Government revenue through royalties from 2000 has almost entirely come from the mining sector as it recorded an annual average of 98 per cent (Ghana Mining Journal 2011). The sector also possesses the capacity to employ a large number of people if it can be well managed and incorporated with the rest of the economy. The small-scale subsectors have been responsible for generating roughly 500,000 jobs and the large-scale sector also managing to create 24,000 jobs. The Chamber of Mines, which is responsible for coordinating the affairs of mining companies, spent over US\$ 6 million on the provision of electricity, health care, potable water, tarred roads, quality education among other livelihood projects in 2007 alone (Chamber of Mines 2008).

However, the increase in the general mining output and revenue for Ghana does not necessarily result in an improved measure of development in the lives of the ordinary Ghanaians as the country still unable to solve its low levels of human development and high levels of poverty, including in rural areas where these mining activities exist (IMF 2012). Ghana epitomizes a model for the poverty-related problems created by the abundance of natural resource in most Sub-

Sahara Africa countries. The mining sector has exposed the flaws of the Ghana's immigration policies and governing bodies as a result of the arrival of Chinese and other foreign nationals in illegal gold business. In 2012, Transparency International surveyed 177 states on its corruption index and Ghana placed 64 in the least corrupt countries. Corruption is prevalent in the country as it is relatively easier for foreign citizens to lure public officials in order to engage in illicit business operations.

3.7 Ghana's Small-Scale Gold Mining

Gold production at the small-scale sector in Ghana has existed for a period of well over twenty centuries. Arab traders as early as the seventh century were attracted to the gold trading in certain areas of the country. Ghana's gold mining before the slave trade and during the peak of colonial rule was through the small-scale section. Although the industry employs several thousands of people, it was usually regarded as part of the informal sector. As a result, no accurate information exists on the exact number of people the sector employs. It was until the 1980s when the government structured laws governing the mining industry that the small-scale sector started gaining prominence. Before the government regulated the sector, most of the revenue generated by small-scale miners was lost through smuggling and illegal purchases. The Economic Recovery Program had targeted the sector because of its substantial earnings. The introduction of the legislative act PNDCL 153 ensured their operations were incorporated into a formal organisational scheme with a series of laid down rules and code of practice (Hilson 2002). The rationale for such a move had stemmed from the performance of the informal small-scale mining sector. It had become a significant source of income generation and a key livelihood strategy for the poor in the midst of Ghana's dwindling economy. Over the past decades, Ghanaian gold production from ASM activities has risen tenfold and doubled since 1998,

accounting for an estimated contribution of US\$ 461 million to the national economy since 1989 (Carson et al 2005). Between 300,000 and 500,000 people are involved in small-scale gold extraction, which amounts to roughly two thirds of Ghana's total gold miners (Carson et al 2005, Ryan 2006). It is estimated that half of those employed in the sector are women, one of the highest rates in Africa. Women who live in mining communities typically work as 'gold panners', carriers, and processors as well as jewellery makers and cooks. Prostitution is also somewhat a huge business in and around mining sites (Hilson and Potter 2003).

According to the World Bank Group (2001), *"small-scale mining is largely a poverty-driven activity, typically practised in the poorest and most remote rural areas of a country by a largely itinerant, poorly educated populace with few employment alternatives"*. It is a global socio-economic phenomenon, which usually takes place in countries with weak economies and offers subsistence miners the opportunity to earn income. However in Ghana, this is no longer the situation as the activity has suddenly changed from a poverty-driven activity to become a huge business that is not only practised in remote rural areas but any available area, which is believed to be rich in the precious mineral. This new illegal gold mining business, which was triggered by the arrival of the Chinese miners in Ghana, has kept on sprouting since the early 2010.

3.8 Ghana's Illegal Gold Mining

Mining at the small-scale level is practised by many developing countries and it has gradually become an importance source of economic livelihood to a large group of people, specifically the rural poor. Akabzaa and Darimani (2001) argued that local Ghanaians preferred to engage in their own subsistence mining rather than working for the well-established British mines. In this way, the miners could keep their precious minerals for themselves and sell it when

necessary. Hence, the colonial powers passed the Mercury Ordinance in 1932, which in effect banned the use of mercury and criminalised indigenous gold mining practises. The move was to push local labour back to the large-scale mines. Ghana's independence and the resultant political instability had extensive toll on the large-scale operations. However, subsistence mining, which had become illegal continued to gain roots in the Ashanti region from the time the law was passed. The Ashanti region is well known for *galamsey* operation as the Ashanti Empire thrived on their gold trading in the trans-Saharan trade during the pre-colonial era. Gold has always been a symbol of power to the Ashanti Kingdom and this made *galamsey* a vocation that has been built on a society with deep cultural heritages.

The Ashanti kingdom, which became a dominant force and the most powerful state in Ghana, continues to use gold jewellery to exhibit the rule, supremacy and rich culture of the monarchy. The only way the kingdom had access to gold was to engage in subsistence mining and this for many years have been an engrained identity of the Ashantis. One unique feature of the kingdom is the presence of the 'golden stool', which is made of pure gold. It is the regal divine seat that binds the Ashanti people together and it is considered sacred. Since the formation of the kingdom, gold has been used to honour traditional ceremonies such as marriages, child naming and funerals in Ghana. Although, the practise of burying dead family members with gold has gradually faded out, it is still very common to use gold as engagement and wedding rings and ornaments for outdooing a new born baby.

The Jerry Rawlings government in 1986, with the assistance of the World Bank and IMF decided to incorporate and legalise the operations of small-scale mining. However, several thousands of miners still operate on concessions without the necessary document. The Minerals Commission in 2010 estimated that roughly 500,000 to 1 million people (including both legal and illegal miners)

are employed by the small-scale sector, which represents an incredible 5 to 10 per cent of Ghana's total employment base. The nature and organisation of the illegal miners have made it almost impossible to know the actual number of people engaged in the activity. With the exception of a few registered operators with mineral rights, no data is readily available on how many people are engaged in the illicit mining activity due to the seasonal changes. Dry seasons in Ghana are known to be the best time for this activity and as a result, it turns out to be more noticeable. Migrants from neighbouring countries also invade the country to engage in the activity (Nyame et al 2008). This brings to bare the general lack of employment opportunities in the sub-region. One important overlooked aspect in *galamsey* is the trend of migration during the peak seasons. Unlike large-scale mining where it is much easy to gather data on areas regarding foreign migrants because it has been under well managed and structured systems, the exact number of migrants entering the activity remains largely unknown.

The activities involving *galamsey* operation has become an important part of the whole legal mining industry and how the state manages the current situation will possibly determine how well foreign investors will be attracted to the large scale mining sector (Global Business Report 2010). AngloGold Ashanti, which happens to be the principal mining company in Ghana, has over the last couple of years been making attempts on how to address the issue of *galamsey*. Despite various attempts made by the security forces of Ghana to make it practically difficult for *galamsey* operators, several hundreds of gold mining activity around the region continues to exist (Daily Graphic 24.10.2013). The difficulties stem from the fact that *galamsey* operations have existed for centuries and such mining operations often represent the only source of livelihood in several communities. AngloGold Ashanti (2006) in its policy paper 'Report to Society' stated that recent droughts in Burkina Faso have reduced the viability of agriculture as a source of income earning and as a result pushing people to migrate to Ghana to engage in the activity. This type of subsistence mining,

which has over the years been considered illegal in Ghana, has taken a new twist with the massive influx of miners from China.

3.9 General Discourse of Chinese Activities in Ghana

China's relationship with Ghana dramatically began soon after independence when a Chinese gymnastic group gave a performance in Accra to honour the first anniversary of independence from British colonial rule. According to Davies (2008), Ghana after officially establishing diplomatic relations, became the second country in sub-Saharan Africa to formally recognise the Government of China. Since 1960, when formal ties were established, the relationships between Beijing and Accra have been nothing short of mutual benefits (Idun-Arkhurst 2008).

Ghana has set an ambitious goal of accomplishing middle-income status by the end of 2015 in addition to reaching the Millennium Development Goals and bridging the country's north and south economic divide. Some major constraints, including low levels of productivity and skills, policy and implementation weaknesses, massive infrastructure gaps in transportation, energy, water and sanitation, lies ahead, but several key governmental policies have been put forward to help achieve the goals. These include increasing agricultural yields, opening up the industrial base and non-traditional exports, and encouraging learning and innovation in information and communications technology to place the country in good stead to benefit from the global information technology (MOFEP 2007). The Ghanaian government sees China as a critical partner in addressing most of these constraints that will impede the country's progress to achieving middle-income status. China, in its attempt to promote the economic and infrastructural development of Ghana, has provided and increased its economic and technical assistance on the construction of roads, energy and telecommunications infrastructure.

3.9.1 China-Ghana Trade Relationship

With China emerging as a global economic powerhouse, it has expanded its bilateral relations to include more countries. Ghana, with its sustained political stability and a steadily improving economic position coupled with the oil and gas discovery in commercial quantities, the country has become an appealing area for both the government of China and private investors seeking new territories in Africa. Ghana-China cooperation has increased considerably in bilateral trading. In 2012, the number of newly registered Chinese investment projects topped Ghana's Foreign Direct Investment list and registered trading volume had increased to US\$ 5.434 billion, where private investors were a key player in these projects (Embassy of China in Ghana 2012).

Goods that were being imported from China increased from 3.7 per cent in 2000 to 9.8 per cent in 2004 (ISSER 2005). IMF (2006) reflected on how crucial Ghanaian imports have been dependent on China, as it has seen its share value soared from US\$ 160.5 million to US\$ 740.1 million between 2001 and 2005. Since 2004, China has been Ghana's leading trading partner in terms of imports. According to the Observatory of Economic Complexity (2011), Ghana's total global import saw 36 per cent coming from China in 2009 and 25 per cent in 2010. This goes to prove how Ghanaian businesses have been reliant on Chinese goods. The mutual cooperation between China and Ghana has been such an essential part of Ghana's economy as trade relations between the two has quadrupled in the last couple of years.

With China's importance as an economic partner growing remarkably, one should also look at the possible challenges posed by such a relationship. The recent concerns rose by the media and the public on Chinese activities in Ghana have been directed towards how China is collapsing the local manufacturing sector. China in 2010 provided 24 per cent of Ghana's imports, but Ghana only managed to export less than 3 per cent to China (Observatory of Economic

Complexity 2011). Ghana is powering China's industrialisation with its raw materials exports in the form of gold and crude oil while importing manufactured goods from them. The government's quest to transform the economy through increased manufacturing is impeded by China's strong presence in the country. Ghana's textile, garment leather and shoe factories are facing huge competition from the rather inferior and relatively cheap goods from China. Although some Ghanaian businesses have taken advantage of what is seen as commercial bootlegging by pirating designs and logos of local Ghanaian industries. The public perception about China in Ghana has been soiled with the massive invasion of inferior goods in the local market.

In recent years, illegal gold mining activities carried out by several Chinese nationals in Ghana has been put questions on China's real motive in Ghana. The Guardian newspaper in 2013 recounted the scale of illegal Chinese gold mining in Ghana as a major national security breach. It exposed the widespread excavation operations and the careless use of harmful chemicals in mining amid other human rights abuses.

3.9.2 China in Ghana's *Galamsey*

Gold mining is not a new phenomenon in China as the country is one of the world's leading and largest producers of gold. Inspired by stories of quick huge profits in Ghana's gold mining, several Chinese nationals decided to migrate to Ghana and engage in gold mining. Before 2010, there were a few Chinese miners in the country and it was also rare to see massive influx of miners from China in other African countries. Many of these miners from China came from the underdeveloped Shanglin county of Guangxi province. The huge number of Chinese miners landing in Ghana at the start of 2010 clearly showed how increased global market prices for a product can largely influence migration to the source of the product. Internally, it goes on to expose the flaws in the immigration policies and control of resources in the country.

This is not the first time Ghana has faced invasion from Chinese national in significant numbers. Ho (2008) emphasised that since 2000, Chinese merchants and entrepreneurs have been arriving in the country in high numbers, putting the estimates at 2,000 to 10,000 people. Most of them arrive in Ghana as workers on large constructions projects but they soon begin to import cheap consumer goods from China. Zambia's President Michael Sata, who was then an opposition leader for the Patriotic Front on his anti-Chinese rhetoric, put up a similar argument when he stated that "*you recruit Chinese doctors, and they end up having Chinese restaurant in town*" (Brautigam 2010: 7).

The Chinese illegal miners were somewhat a necessary evil in Ghana. They were the financiers of the expanded illegal mining with regards to equipment. Heavy-duty machinery such as excavators and caterpillars were introduced into *galamsey* operations. Though, it boosted the reward aspect in the activity, the environmental impacts were highly devastating. Interviews conducted revealed mixed reactions from local Ghanaians on the impact of the Chinese miners. The Chinese alluvial miners have largely changed the 'low-profile' image of the ASM and have expanded the activity dramatically in recent years particularly of gold. Before the Chinese introduced mechanised mining into the *galamsey* activities in Ghana, governments had not brought up any effective measure to discourage people from seeking a living from the activity.

4. REGULATING THE MINING SECTOR IN GHANA

The structure of this chapter is based on the three specific questions, which will provide the basis for answering the overall question. In this chapter, the first of three specific research questions is answered. I will discuss the legal regulations regarding mining in Ghana by examining some of the key sections of the mineral and mining laws of the country. I will first highlight on the country's previous legislative act on mining (PNDCL 153) and then look into the impact of the new mining law (ACT 703). The present role of some governmental bodies connected with the mineral and mining act such Precious Mineral Marketing Company will also be discussed. This chapter will then highlight on how actions against or for *galamsey* miners have been politicised and the challenges of government in curbing the activity.

4.1 The Regulations of the Mining Sector in Ghana

One of the positive spots when Ghana initiated the Economic Recovery Programme (ERP) in 1983 was the detailed attention given to the mining sector and how it was regulated. The formation of the Minerals Commission and the introduction of the Mineral and Mining Law (PNDCL 153) in 1986 impacted heavily on the country's mining industry and the economy as a whole. The colonial government during the British rule in Ghana had no clear cut regulations governing the sector except to control gold mining and restrict the possession of gold in order to protect the earnings of foreign companies. There were no significant changes to government control from the time of independence until the ERP. The central government loosened its control in the industry and promoted increased privatization, and embraced both local and foreign firms.

The Mineral Commission, which was setup to regulate the industry, pushed for other pronouncements such as the 1985 Profit Tax Law (PNDCL 122) and the 1987 Mineral Royalties Regulations (L.I 1349). The operations of small-scale miners before 1989 were largely unregulated and categorised as unlawful. Due to the illegal nature of the activity, most of the small-scale miners smuggled the precious minerals to neighbouring countries to sell. The Commission at that time became very conscious of the activities of the small-scale mining sector and put into force the 1989 Small Scale Mining Law (PNDCL 218), which gave solid legitimate support to their operations.

The provision of the PNDCL 153 and 218 offered substantial tax reliefs and increased capital allowances to both foreign and local mining companies. The government allowed companies to enjoy 75 per cent of capital investment against taxes in their first year of operation and 50 per cent in subsequent years while the rate of corporate tax was set at 45 per cent. A corporate tax, which was pegged at 55 per cent in 1975 had been reduced to 35 per cent by the end of 1994 (Campbell 2004). Royalties, which became a preferred form of government taxation on foreign companies had its rates reduced from the previous 6 per cent in 1975 to 3 per cent in 1987. Permission was granted to companies to hold at least 25 to 45 per cent of their total export earnings and government also gave foreign investors the chance to open offshore bank accounts to enable payment of dividends and foreign workers and secure loans (UNCTAD 2005).

4.2 Ghana's New Mineral and Mining Act (Act 703)

The PNDCL 153 was regarded as one of the best examples of mining practises and had gone to become the basic mining legislation in sub-Saharan Africa but changes at the international level on mining compelled its adjustment in 2006. After an extended review from the early 2000s, the Mineral Commission sought technical assistance from the World Bank and updated the governing legislation

for the mining sector in 2006. The new Mining Act was enacted by the President and Parliament of Ghana to review and enhance the law relating to minerals, particularly gold mining, and to deliver connected purposes. The new legislative framework was provided by the 2006 Minerals and Mining Act 703, replacing the twenty-year-old PNDL 153. The objective of Act 703 was to improve most of the economic incentives in Law 153. In March 2006, the Government amended section 25 of this law to allow for the establishment of a fixed 5 per cent royalty rate on total revenues earned from minerals by all companies holding a mining license in Ghana. The former section 25 of the law allowed that the rate of royalty not be more than 6 per cent or less than 3 per cent of the total revenue of minerals obtained by the mining company. The elimination of the extra earnings tax was one significant change that took place in the new mining law. This particular tax was intended to ensure that government gets extra benefits from mining companies when there is a sudden increase in gold prices at the world market.

Rutherford and Ofori-Mensah (2011) raised questions on whether Ghana has made the right decision in ensuring that the additional profit tax elimination would not put the economy at the losing side when there is a sudden surge in mineral prices particularly of gold. Reflecting on how PNDL 153 had significantly improved the total revenue and economic situation of the state, the application of this new law might limit Ghana's benefit. One clear case was when world market prices for gold hit US\$ 1,500 per ounce in 2011 while the price were pegged at US\$ 550 at the time the law was reviewed in 2006.

With government placing more emphasis on the much-expected substantial revenue from the oil discovery, the country is missing out on the prospect of making additional earnings. The World Bank argued that reduced royalties appeal to foreign investors and any rise in royalties is likely to distort investment. However, UNCTD (2005) expressed concerns on the actual income the country

gained from its mining exports. Ghana's total value of export earnings from the mining sector is only about 5 per cent. The IMF (2008) conducted a similar assessment on the country's new mining policy had reduced its reserves and budgetary revenues as a result of the exceptionally generous incentives given as stimulus to investors. The revenue derived from the mining sector is relatively insufficient considering the yearly earnings of the mining companies.

4.3 Legal Provisions in the Minerals and Mining Act 703

This section will discuss how the legal provisions in Ghana's mining laws have affected the small-scale sector. Ghana's new mining laws (Act 703) are affected by several legislations, which include;

- The 1992 Constitution,
- The Mineral and Mining Act, 1986 (PNDCL 153)
- Precious Minerals Marketing Corporation Law, 1989 (PNDCL 217)
- Mineral Royalties Regulations, 1987 (L.I 1349)

A prospecting license may be granted for an initial period not to exceed 3 years and may be extended only once for a period not to exceed an additional 3 years. Upon the expiration of a reconnaissance or prospecting license, the holder may apply for a mining lease. The reconnaissance license allows a company to conduct surface work but does not necessarily mean the company has the right to commerce mineral mining. A mining lease may then be granted for an initial term not to exceed 30 years and may be extended only once for a period not to exceed an additional 30 years.

The Government is entitled to a free-carried equity interest of 10 per cent in all mineral ventures (Parliament of the Republic of Ghana, 2006: 12, Ministry of Finance and Economic Planning 2010: 85). It takes at least 21 days for the Commission to recommend an applicant to the Minister if all documents

provided are legitimate and fall within the requirements of the law. In the industrial minerals sector, reconnaissance and prospecting licenses and mining leases may be granted only to Ghanaian citizens unless the proposed investment exceeds US\$ 10 million. Small-scale mining licenses are also reserved only for Ghanaian citizens and are granted for a period not to exceed 5 years; upon the expiration of the license, it may be renewed for a period to be determined by the Minerals Commission (Parliament of the Republic of Ghana 2006: 36).

It is important to highlight some of the basic legislations in the mining sector. In order to know why people engage in *galamsey* activities, there is the need to understand the politics of the legal process of mining and the penalties for getting involved in the activity.

4.3.1 Sections of the Legal Provision on Large-scale Mining

In Ghana, all minerals are owned and controlled by the state. The President has assigned the Minister of Mines the power to grant mineral and mining rights to individuals and companies. Mineral rights are defined legally to include rights relating to exploration, prospecting and mining for minerals.

Every mineral in its natural state in, under or upon land in Ghana, rivers, streams, water-courses throughout the country, the exclusive economic zone and an area covered by the territorial sea or continental shelf is the property of the Republic and is vested in the President in trust for the people of Ghana.

The Minister on behalf of the President and on the recommendation of the Commission may negotiate, grant, revoke, suspend or renew mineral rights in accordance with this Act.

The Ministry only provides license to investors on the advice of the Minerals Commission. The sector Minister although exercises the power to issue, transfer, amend, renew, cancel or define license, the decision is largely influenced and guided by the advice of the Minerals Commission. Without the consent of the Ministry, trading or selling a mineral right to a third-party is illegal.

Except otherwise provided in this Act, a person shall not export, sell or otherwise dispose of a mineral, unless the person holds a licence granted by the Minister for that purpose. The Minister, on the recommendation of the Commission may issue the licence in the form and on conditions determined by the Minister. A license issued is not transferable.

There are specific codes for large scale mining operations as their activities also required mining rights to be granted even if they have acquire lands from traditional rulers. Under the mineral rights, individuals could not be given permits for large-scale activities. Qualification is somewhat restricted to companies.

Unless otherwise provided in this Act, a mineral right shall not be granted to a person unless the person is a body incorporated under the Companies Code 1963 (Act 179), under the Incorporated Private Partnership Act 1962 (Act 152) or under an enactment in force.

Before a company can apply for a mineral right, they need to demonstrate a proof of their capital, both in economic terms and technical procedures. Companies are required by law to train and employ Ghanaians.

An application for a mineral right shall be submitted to the Mineral Commission in the prescribed form and shall be accompanied with a statement providing, particulars of the financial and technical resources available to the applicant for the proposed mineral operations, and an estimate of the amount of money proposed to be spent on the operations.

In an attempt to attract local companies in Ghana with the goal of promoting local employment, the amount of capital investment required from non-citizen in order to apply for industrial mineral right was much higher.

A person who is not a citizen may apply for a mineral right in respect of industrial mineral provided the proposed investment in the mineral operations is US\$ 10 million or above.

4.3.2 Sections of the Legal Provision on Small-scale Operations

The government, in its bid to improve the production of minerals and avoid smuggling at the small-scale sector, made provisions for their activities in Act 703. There was no significant review to the law, which was first provided by the 1989 Act 217. The objective of the law at that time was to incorporate the operations of local subsistence miners whose operations were regarded as illegal. Although, some of the small-scale miners now possess mineral rights, a large number of them still do not have the right to carry out any mineral activity. The license to operate or undertake any small-scale mineral venture is issued by the sector Minister. The complex bureaucratic channel and the clumsy regulatory delays concerning issuance of permit and the high cost of license fee has become a burden for most of these miners. Despite incorporating small-scale mining into the legal framework, the government's attention and support is tilted towards the recognized large-scale mining companies.

Despite a law to the contrary, a person shall not engage in or undertake a small scale mining operation for a mineral unless there is in existence in respect of the mining operation a license granted by the Minister for Mines or by an officer authorized by the Minister.

An application for a license shall be made in a form the Minister may direct to the office of the Commission in the designated area and shall be submitted with a fee the Minister may determine.

Where a mineral license has been granted over a parcel of land, another mineral license of the same kind shall not be granted in respect of the same land.

This sub-section of the law puts the operations of the Chinese miners into the illegal frame as it does not give room for non-citizen the right to apply and acquire for mining right. Unlike the large-scale mining laws, qualification is strictly given to Ghanaian citizens.

A license for small-scale mining operation shall not be granted to a person unless that person is a citizen of Ghana, has attained the age of eighteen years, and is registered by the office of the Mineral Commission in a designated area.

The duration of a license is made to last for five years. It is renewable but the long administrative procedures made it almost impossible to apply for a new one when the permit is due. There are many small-scale mining operators with expired mineral rights.

A license granted under section to a person, a group of persons, a co-operative society or a company shall be for a period not more than five years from the date of issue in the first instance and may be renewed on expiry for a further period that the Minister may determine.

General penalty meted out to offenders did not necessarily discourage these miners from indulging in the activity. The penalty for engaging in *galamsey* is significantly lower considering the earnings they make in the activity.

A person found guilty of an offence under this Act for which a penalty has not been provided is on summary conviction liable, on first conviction, to a penalty of a fine not more than the cedi equivalent of US\$ 5,000. On a second or subsequent summary conviction for an offence under this Act, the court may impose a penalty, which is not more than twice the penalty previously referred.

Although penalties exist in the mining laws of the country, they do not deter people from engaging in the activity. Ben Aryee, the then Chief Executive of the Minerals Commission of Ghana, shared a similar opinion when he emphasised that “*insufficient sanctions in the laws covering illegal mining are part of the problem and small-scale mining laws should be amended to impose stiffer punishment on persons who engage in it*” (Daily Guide Newspaper, 20 June 2013).

The way the mining regulations are set up clearly gives unfair advantage to the big mining corporations. Most of the old mining laws (PNDL 153), which were

influenced to a high degree by the SAPs, were upheld in the Act 703. The SAPs gave rise to the inclusion of small-scale activities but at the same time maintained a preference for the large-scale companies in the area of concession and renewal of permits. These regulations have made it extremely difficult to secure a license for small-scale mining. With most of the miners resorting to *galamsey*, the government does not possess the ability to curb the action of these miners even if it is a criminal offence to engage in the activity.

The high cost and bureaucratic nature of obtaining small-scale mining license has forced many people interested in the activity to venture into illegal gold mining. The Small-Scale Miners Association in Bibiani, the eastern part of Ghana claimed that estimated processing fees of GHC 7,000 (equivalent to US\$ 3,000) coupled with protracted delays, which typically take 2-3 years before one can secure the obligatory and required documentation for a mining concession has been the stumbling block for the average small-scale miner. The end result for these miners is to resort to illegal mining in their bid to make a living or earn profit.

4.4 The Precious Mineral Marketing Company (PMMC)

The official company tasked with buying gold from small-scale legal mining operators is the PMMC in Ghana. In 1989, the government of Ghana established the company to purchase minerals from small-scale producers in a struggle to stalk smuggling of minerals especially gold and diamond to Cote d'Ivoire. The country's gold operations are in two sectors, the large-scale sector and the small-scale sector. The PMMC is responsible for the buying all the gold produced by the small-scale sector, which includes individuals and, small and medium size mining companies with the license to legally mine. The company exports the gold abroad on behalf of the small-scale companies. They also have the responsibility of promoting the legal small-scale mining sector.

From 1989, when the government regularised small-scale gold mining operations in the country, it was estimated that about 60,000 to 80,000 ounces of gold previously produced by small-scale miners were smuggled out of the country annually. Government took an initiative to charge PMMC with the task of buying all the gold produced by these individuals and small-scale companies. The company's purchases was about 11.68 per cent of total gold exports from Ghana but currently, PMMC accounts for 23 per cent of Ghana's total gold export. Data gathered from PMMC revealed that the company purchased over 851,030 ounces of gold worth approximately US\$ 467 million from 1989 to 2009 (PMMC 2012)

Table 2. The PMMC's Gold Exports 2005-2011

YEAR	OUNCES (000)	VALUE (\$MILLION)	AV. PRIZE/OZ (\$)
2005	29.74	13.13	509.19
2006	23.49	14.27	607.49
2007	18.60	11.71	629.61
2008	38.12	32.87	861.79
2009	76.88	75.48	981.78
2010	384.51	463.42	1205.22
2011	254.05	393.91	1550.50

*Source: Data retrieved from PMMC's official webpage.
<http://pmmcghana.com/gold>
 (Accessed on 15 September 2013)*

From the PMMC gold exports in *table 2* and the official webpage on the company, it indicates that gold sold in 2010 and 2011 alone can almost be compared to the total gold sold from 1989 to 2009. The company is also

responsible for buying diamonds and silver from all small-scale operations. Diamonds and silver remained relatively the same in quantity of exports from 1989 up to 2011. The sudden increase in the number of illegal miners in 2010 had a significant impact on the total gold purchased by PMMC. With the influence of ‘middle-men in *galamsey* activities, illegal gold mined from different sites in Ghana found their way to be sold to PMMC.

The PMMC official webpage openly admits that they also purchase gold from *galamsey* operators who they describe them as ‘gold winners’. The company states that “*PMMC purchases gold from small-scale miners and gold winners popularly known as galamsey operators, and export abroad on behalf of the small scale companies who are licensed with PMMC*”. This goes to expose the government’s schizophrenic desire of finding a solution to curb the spread of *galamsey* miners but tasking a company to purchase gold from the same miners (The UK Guardian Newspaper 2013).

4.5 The Role of Political Parties and the Media

Ghana practically has a two-party system since its transition to democratic governance. This means that there are two principal political parties that can obtain voting victory. Although there are several other political parties, it is extremely difficult for any of them to attain 1 per cent of total vote cast since the country began practising democracy in 1992. The Ghanaian parliament and its committees are relatively balanced in terms of political power. The nature of Ghana’s Parliamentary democracy provides possibility for Members of Parliament (MPs) to direct their focus on immediate achievements in the bid to satisfy their various constituents. MPs in Ghana have rather prioritized short-term community development and allegiance to their affiliated political parties.

Political parties in the country especially the National Democratic Congress (NDC) and the New Patriotic Party (NPP) are known to have a strong whip on every crucial national issue. Parliamentarians are guided and supervised by their party hierarchy when voting on national issues. This influences independent initiatives and puts MPs in a situation where they find themselves to a restrained rather than a far-reaching national standpoint on key issues. Securing re-election is the primary reason why MPs align themselves to their internal party codes and not on their individual efforts to push Ghana's development forward. This has been a huge part of the repeated governance flops in the economic sectors of the Ghana, which mining is a big part.

Radio and television reports play a huge part in the daily lives of local Ghanaians. The print media however has been losing its impact as a powerful tool in the spread of information. The media has given extensive coverage to the rising illegal gold mining in the country. One key reason for the media's far-reaching coverage is as a result of the criminal activities such armed robbery, car snatching and serial killings that are connected to the *galamsey*. One situation that tends to come out as a result of the media broadcast of illegal gold mining activities is that it again pushes more people to be *galamsey* operators. It is a stereotypical fact that *galamsey* operators are wealthy people. The more the media exposes new illegal mining areas, the more unemployed youth all across the country rush to these sites to seek an earning. The National Commission for Civic Education (NCCE) in Ghana, which is responsible for enlightening people on challenges the country faces, is yet to bring out a campaign against *galamsey* operation. Most of their campaigns have been about HIV/AIDS, malaria prevention and treatment, hygiene and clean water.

4.5.1 The Influence of *Galamsey* in Local Politics

Government's traditional policy of non-negotiations with *galamsey* operations has done brought no positive solution to the activity. *Galamsey* operators are

branded as ‘criminals’ by the government and to a lesser extent, by the media. These influence miners go undercover during operation, hence making it extremely difficult to quantify the scale of the environmental and social damages they cause. The central government inability to deal with the rising unemployment situation in the country has also made the activity very difficult to tackle. In situation where strict measures are taken to curb the actions of *galamsey* operators, politics seep into it. Ruling parties have a duty to keep the mouth-watering promises made to the people who voted them in office and opposition parties aim to win political power. Since *galamsey* operators are usually the financial head of their various families, there is several numbers of people who enjoy a livelihood from the activity and who could effectively decide local elections. Government usually turn a blind eye on illegal mining during election years. *Galamsey* in the Manso area have over the years influenced local politics and it continues to be a key element in policy decisions at the local level. Members of Parliament in the area engage the services of the youth to campaign for them and these are the same people engaging in the activity. Most elections regarding local district executives is greatly infused by which candidate can make policies that can ease the work and engagements of *galamsey* operators.

4.6 The Challenge of Government

This question will reflect on the difficulties and shortcomings of government in addressing the issue of *galamsey*. *Galamsey* operations is seen and judged with two different perspectives. The government sees the activity as illegal and for that reason has criminalised any engagements these miners undertake. The miners, who are mostly the unemployed youth and subsistence farmers, do not see anything criminal with the activity even if the government forbids it. *Galamsey* has deep traditional roots and the challenges government faces goes beyond arresting and persecuting the miners.

4.6.1 The Complex Dispute of Ghana's Land Tenure System

The land tenure system in Ghana is such that ownership of land is defined through a blend of complex and multiple legal features where both legislative and customary laws co-exist (Lavingne-Delville 1998 cited in Djokoto and Opoku 2010). The loosely demarcated land rights in the country have also given rise to the activity. Among the Ashantis, the King and to a lesser extent, his sub-chiefs are the custodians of all lands in the region and they possess the power to grant land ownership to the people. By constitutional decree, all lands in Ghana are vested in the President; the central government do not have enough power to oversee the sale or ownership of land in the Ashanti region. With traditional authorities holding most of the legal and customary ownership to lands in the region, *galamsey* operations have been firmly placed in a position where it is easy to bypass state protocols concerning the acquisition of land. One traditional chief in the Bosomtwe district, which shares boundaries with Amansie West, gave his views on land acquisition.

After I swore allegiance to the Ashanti King, I became the custodian of all the lands allocated to my community. Nevertheless, that does not mean I can sell the lands without informing my kingmakers and the committee of elders. If the government wants to use a portion of the land for development, I will easily hand it over. However, if an individual or a group of people wants to purchase land, I must first see how it will benefit the interest of my community. However, there are also some clans and families within my community with customary rights to certain lands and they can decide to do whatever they want with it.

Ghana could adopt this strategy at limiting the spread of *galamsey* operators but one significant shortcoming persist. The issue of land tenure system in Ghana is still not well defined. Although all lands in Ghana are vested in the President, traditional rulers and local chiefs have customary rights to most lands. In the case of Ashanti Region, the King and several other sub-chiefs have the power to demarcate and sell lands to individuals and groups. Communities in general do

not particularly possess ownership rights unless it has been bestowed to them through inheritance.

4.6.2 The Struggle for Mining License

Government assigned bodies such as the PMMC and the Minerals Commission have adopted some policies that should have help quantify the extent of *galamsey* activities, but these policies have only fuelled *galamsey* operations. The PMMC for instance have adopted a monopolistic and schizophrenic attitude where no other agency can buy gold from small-scale miners. The company has openly stated on their official webpage that they purchase gold from *galamsey* operators. The Minerals Commission bureaucratic approach to mining permits has somewhat deepen the fierce competition for land among large-scale and small-scale gold mining companies. *Galamsey* operators are always ready to invade any land left unconfirmed for either interest group. However, one interesting finding was how licensed small-scale operators can at the same time, work as *galamsey* miners. This seems to be the trend when the Minerals Commission delay in allocating land concessions to them or when there is a struggle for land between small-scale and large-scale miners. Allocation of mining rights on a particular concession can take up to two years if litigation surrounds the land. As a result of the unequal power relation, small-scale miners have come to accept the notion that they cannot compete against large-scale companies when the decision about rights to mining lands rests with the Commission. In this situation, they avoid the power struggle and begin to operate without documents legalising it.

Large-scale mining companies possess the luxury of hiring private security to protect their premises. This was very evident when I got to the premises of Gold-line Mining Group of Companies. In the company of my research assistant and a taxi driver, one could see private security personnel with guns patrolling the surrounding area. They did not seem friendly and were ready to engage anyone

who acted questionably. However, a police officer on duty at the entrance of the company played down the intimidating stature around the vicinity and stressed it was the only means to scare off trespassers who usually turned out to be *galamsey* operators. This demonstrates how the large-scale mining companies are perturbed by the presence of illegal miners around their designated area of operation.

The findings and discussions in this chapter exposed the shortcomings of the legal provisions in Ghana's mining laws. These weaknesses are not only evident in the key sections of the regulations but also in the bureaucratic structures setup by the government to make these regulations work. Although the government has reformed the legal organisation in order to push *galamsey* in practical difficulties, the activity has continued to flourish because of the politics of the legal protocols regarding gold mining in Ghana. An understanding of the role traditional institutions play in land rights in the country has also opened up another perspective on why people engage in illegal mining.

5. LIVELIHOODS AND IMPACT OF CHINESE MINERS

5.1 Introduction

I asked and discussed a wide range of questions where the focus was to understand the overall impact of *galamsey* on community development and poverty reduction. This chapter is

into two main sections, where the following research questions are answered.

- *What has been the impact of galamsey on the livelihoods of the local people?*
- *How, and to what extent, has the arrival of the Chinese miners in Ghana changed galamsey activities?*

In answering these two remaining questions, I will be able to answer the overall research question.

5.2 Galamsey Operations on Development and Poverty Reduction

In discussing how the activity impact on development and poverty alleviation, the study will give an account of how the respondents perceived the impact of subsistence gold mining in general on community development and how it trickles down to reduce poverty among the people living in these communities. I use the term subsistence because of how different interest groups perceive this type of unregulated small-scale gold mining. The government and the media

brand the activity as illegal, whilst the mining communities see *galamsey* operations as a means of livelihood and do not accept the illegal framing of their actions. Eric Asante, a popular gas filling station operator gave his opinion on whether *galamsey* was illegal or not. Although he admitted that the activity causes serious damages to their farmlands, he expressed that: *“if it is not wrong for someone living on a fertile land to farm, if it is not illegal for those living around the country’s coastal areas to fish, why then should it be a criminal offence for those sitting on gold and wants to engage in mining?”* (Fieldwork Interview, July 2013). Many of the respondents who directly and indirectly profited from the activity shared his opinion on the legalities of *galamsey*.

The local inhabitant’s shallow understanding on State laws and regulations is seen as one of the key factors why they disregard the government’s branding of *galamsey* as illegal. In the ensuing sections, I will draw on the livelihood outcomes in figure 1 to assess the extent to which *galamsey* operations have affected the community’s development and poverty reduction. I will particularly examine how people engaging in *galamsey* activities have shaped the livelihood outcomes concerning community development and poverty reduction. This question generally considers how *galamsey* operations have influenced local livelihoods and does not take into consideration the Chinese version of the activity. From fieldwork interviews and observations, I will reflect on eight aspects of the livelihood outcomes by adopting a modified version of the DFID framework. I will highlight more on income, food security and social vices as these three were the most visible impact *galamsey* activities had on the communities.

Table 3. The Immediate and Long-Term Impact of *Galamsey* Activities

Most Visible Impact	Least Visible Impact
Increased Income and Consumption	Reduced Natural Resource Base
Threat to Food Security	Improved but Limited Housing
Increased Social Vices	Availability of Credit Facilities
Reduced Health and Well-being	High Cost of Living

Table 3 shows how some of the livelihood outcomes from *galamsey* engagements are more visible than others. These effects, whether more visible or less visible, could be positive or undesirable. I discuss how each of these outcomes is recognised from the perspective of the community. The observed data gathered from the fieldwork gives an indication of how respondents shared divided opinions on the impact of the activity on poverty and development. In order to weigh the impact, there is the need to understand the meaning of poverty from the perspective of the people living in the Manso community. The responses that were given when I asked the *galamsey* operators the question of what is poverty were reflective of how poverty meant the lack of money and material possession.

The United Nations (1995) emphasises that poverty in general takes different forms, which includes *“lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of education and other basic service and homelessness and inadequate housing.”* Most of the UN perspectives on the various forms of poverty were very evident

in the mining areas of the AWD. However, poverty in most cases is defined and measured on income levels in the mining communities.

5.2.1 Income

One key factor in assessing poverty is by using income levels. Although poverty is also based on access to services, most of the respondents in the mining communities in Manso measured poverty on how much income one possesses. Income is usually conveyed in monetary terms in which it is seen as consumption and saving opportunity gained by a household in a particular period of time (Barr 2004). Much of the community's income relies on farming and mining. However, mining proved to be an activity that draws people closer to earning substantial amount of money. Case and Fair (2007) measure households and individual income on profits, salaries, wages, rents, payments and other means of earnings received during a period.

The average income in the district is US\$ 230 and the main sources of household incomes came from agriculture, remittances abroad and non-agricultural activities, which mining run key among them (AWMD 2012). Kofi Tawiah, who previously worked as a cocoa farmer but sold his large parcel of farmland to a group of Chinese miners, branded farming as 'agricultural poverty' where he claims there are countless hardships associated with farming. He gives his opinion on how it is easy for farmers to change their source of livelihood if the opportunity presents itself.

How many people in Ghana can boast of being rich from farming? We live in a country where our leaders do not care about those who grow what they eat. If our ancestors left us with money (gold), we should be able to secure the future of our children (Fieldwork interview, July 2013).

Although, agriculture is still a key part of the coping strategies in Manso Nkwanta, it has repeatedly remained a feeble source of livelihood in the area. What has soon become a new scenario is the way farmlands are sold off to *galamsey* operators. Many of the farmers in the mining areas easily sell off their land to Chinese miners if gold exploration activities on their farmlands prove to be positive. The average land size of a cocoa or oil plantation farm in the district is roughly 13 acres. The amount is so huge that farmers could actually use part of the money to build a house and start a new profitable trade. Farmers are actually eager to sell their lands to the Chinese regardless of what will happen to the land. The reasons given as to why this new development has become a pattern is a consequence of the hardship brought by an over-reliance on subsistence agriculture for a living. With poverty defined from an income perspective, most of the respondents will rather sell their land assets when they receive the right offer.

5.2.2 Food Security

The manner in which farmlands are being sold off to *galamsey* operators is alarming. Cocoa and other crop farmers would sell their lands for hefty sums of money if they were among the ‘lucky’ ones where gold deposits were found. One would normally expect the district to experience food shortages because of the continual sale of farmlands but this has not being the case at the present moment. The district still possesses enough fertile areas and it is one of the highest agricultural producing areas in the Ashanti region even though farm activities are done on a small-scale level. Availability of food was not a problem since they could still purchase food items from neighbouring communities because of their high purchasing power. However, the prices of foodstuffs are the biggest concern in the communities where mining operations are active. The high spending attitude of the *galamsey* operators and the perceived big earning appearance of

the activity have driven foodstuffs and commodity prices way above what is considered acceptable.

The concerns raised by some of the teachers in the community related to how food security could be at risk in the future. One educational officer expressed his concern that: *“If we keep selling fertile lands to the Chinese miners all in the name of money and gold, then we will soon have to cook gold instead of plantain and cassava”* (Fieldwork interview, July 2013). However, Ghanaians bought most of the land in the area and not the Chinese, according to my informant. The Chinese in many ways have influenced the prices of these lands and several other commodities. With farmers in neighbouring communities transporting their farm yield to sell in Manso Nkwanta, many of the market women seemed pleased with the way the prices of foodstuffs are high. In that way, these women can keep up with the high cost of living in the community. Interestingly, food prices were not the only peculiarly expensive commodity in the community and this had a huge impact on the cost of living.

5.2.3 Cost of Living

The activity does not only benefit those directly involved in it but also those engaged in other commercial activities. Service renders such as taxi drivers, gas filling stations operators, mobile call card sellers and pharmaceutical products had prices that the average person living in the community could not afford to buy. Most of these service renders are taking advantage of the economic perception about *galamsey* and making huge profit margins in these mining villages as compared to those in surrounding communities and the big cities. For instance, taxi drivers in Kumasi, the capital city of the Ashanti Region make a daily sale of US\$ 20 to their car owners but in Manso Assamang, car owners ask their taxi drivers to make US\$ 50 each day. The cost of renting a one-bedroom apartment was pegged at US\$ 200 per month in a community where it used to cost US\$ 100 for an entire year. Almost every commercial activity around illegal

mining communities makes twice or more as much profit as the same activities in the capital city of the region.

A radio presenter who works in Kumasi but hails from Manso summed this up when she said, “*everyone is everybody’s galamsey machine*” implying, everybody is profiting in one way or the other from the impact of the activity. His assertion is not entirely true as most of the Manso inhabitants were subsistence farmers who usually grow what they eat and did not have the possibility of selling off their produce for high prices. Also, civil and public servants such as teachers, police, nurses and other government workers who find themselves living in these communities have to bear the extremely high living cost as a result of the *galamsey* operations.

5.2.4 Social Vices

The issue of social vices was discussed with most of the opinion leaders in the Manso communities. The local chief of Manso Nkwanta raised concerns about the negative social impact the activity is having on his community. A visit to the Manso Police Station shows of how busy police personnel have been since the activity skyrocketed. Social vices are seen as any immoral act that emanates from the outcome of a moneymaking activity such as drugs dealing, prostitutions, armed robbery and gambling. Although they exist, these activities are wildly unacceptable in the Ghanaian traditional societies. Manso has been accustomed to such social vices that armed robbery and drugs dealings are gradually turning out to be another livelihood strategy for the youth living in the surrounding communities. The issue of armed robbery became so rampant that the Chinese miners kept in their possession guns and rifles in order to fight off armed robbers when they are transporting the refined gold to the cities.

A focus group discussion with Kwame Donkor and his four other friends centred on why the usage of drugs has become popular among *galamsey* operators.

Galamsey activities, especially the type that requires miners to go into a tunnel several feet underground puts these miners through loads of physical pain. They use illicit drugs to relieve them of any physical and psychological pain they experience in the course of this dangerous operation. Prostitution is another industry that was rapidly gaining strong ground because of the mining activities in the communities.

5.2.5 Health

Undoubtedly, exposure to mercury is the most dangerous health risk that *galamsey* miners are posed to. However, most of these miners do not know the effects of using mercury to extract the gold. Mercury is highly toxic and poses a health hazard through direct exposure or via the food chain (Hilson 2006). These miners rely on mercury to amalgamate the gold. This is usually done with their bare hands and naked eyes. After use, the mercury is disposed into rivers causing pollution. Every single river and their tributaries have been polluted beyond what is deemed acceptable. The Mineral's Commission controls and oversees who gets access to mercury among mining companies. However, mercury usage is unregulated and prevalent throughout the *galamsey* sites in the community and this has led to the contamination of River Offin. Other people living 100 kilometres away use these same rivers for domestic purposes like drinking and cooking.

The biggest concern regarding the health risks of the miners are pneumonia and other respiratory diseases. The mining sites can get very cold where temperatures could drop to 5 degrees Celsius for the miners who work in the night. The miners usually complain about cough, chest pains and fever when they are done with their night shifts. Mine collapse is perhaps the worst nightmare for these miners. The human cost in the activity perhaps the worst in the country. The Chamber of Mines disclosed that in 2011, 300 *galamsey* miners were reported dead in mine related accidents (Daily Guide Newspaper 19.08.2012). Senior nursing officers at

the Komfo Anokye Teaching Hospital (KATH) in Kumasi has seen several cases of *galamsey* miners being admitted to the hospital's emergency ward. However, the hospital usually gets cases of serious mine accidents rather than pneumonia, which the nurses believe is the biggest cause of death among miners. Although, pneumonia is their biggest concern, they prefer to see a doctor when they get involved in a mining accident. They usually seek for self-medication when it is not a serious injury.

5.2.6 The Least Visible Impacts

While income, health and well-being are seen as some of the biggest livelihood impact that result from the activity, many of the respondents regards some impacts as less visible. Although, the activity goes a long way to reduce the natural resource base in the community, some of the miners see the mineral as ancestral blessing. As such, if they continue to pour libation and keep seeking the hidden places of the sacred mineral from the gods, there will always be gold in the mines. However, some of the seasonal miners who move from one mining town to another did not agree to this assertion. 32 year old K Busia, who came from the Eastern region to buy a concession at Manso expresses worry about how easily the land lose their gold value. *“When I first came to Manso, you could make gains on the same land for a whole year, but today a concession lasts for only a month”* (Fieldwork Interview July 2013). Why this is the case was simple to answer. The Chinese miners became the game changers in the activity. The kind of machinery they use on these concessions can rival those used by AngloGold and Newmont Ghana Limited, the two biggest companies in the country.

Housing has also become a new source of worry to those living in mining communities. It is a different case for the miners. They possess the kind of rents property owners ask from them but teachers, farmers and taxi drivers see the situation as absurd. What is surprising about housing in Manso is the type of

houses these miners are building. Usually, housing in rural areas are built with clay and mud but there is a new Manso, which is witnessing houses built with cement blocks and bricks. Bongo and Seedorf who doubles as *galamsey* operators and untrained building constructors were utterly surprised how quick these houses are built. *“My friend, these miners are building houses as if it costs 10 cedis (equivalent of US\$ 4). It takes about 6 months for them to complete it and they fix sliding doors, air conditioners, floor tiles, nice roofing sheets, and all that.”* (Fieldwork Interview July 2013).

However, most of the miners (who are yet to find luck and strike gold), offered a spiritual dimension while explaining how easily their colleagues could afford to build such houses. They strongly believe their wealth comes from other sources, which has less to do with *galamsey*. ‘*Mallams*’ (a local name for witch-doctors) are seemingly spread out across the region luring people who want to make money to seek for their services. The miners hold the belief that these witch doctors are the root causes for such wealth.

It is quite rare to see many financial intuitions stationed in rural areas. Manso has soon become a destination for micro finance companies that are willing to give loans to *galamsey* operators. However, most of the miners would rather keep their money than to save. They will also not assess the available credit these companies are willing to offer. The reason why they are not assessing such opportunities has to do with trust issues and interest rates. Previous micro finance companies in Ghana have duped their clients of huge sums of money. Again, these companies are also there to rip off customers who assess the loans with high interest rates. Three micro finance I enquired about their loan schemes were willing to offer 4 to 8 per cent monthly interest on their loans depending on whether you operate a saving account with them or not.

5.2.7 The Transport Business

The number of taxis and *trotro* (a local transport bus, which usually conveys 15 – 25 persons) are increasing in the district daily. This private transport system is perhaps the second biggest venture that can earn profits close to what *galamsey* miners make. One taxi driver who had just acquired a brand new taxi from a micro finance company happily asserted that the taxi business is the best job in the Manso area. *“It took me a little over one year to pay off the loan on my car. Had it not been a problem I encountered with the engine, I could have bought another taxi”* (Fieldwork interview July 2013).

The private transport owners in Manso could earn twice as much as those in Kumasi. The same can be said for gas filling station operators who sell fuel for prices way beyond what the government has authorised. The main problem taxi drivers in the area face are related to car snatching by people who later use the car for robbery. Armed robbery has become a daily nuisance to the residents in the area. Although there are security checkpoints and mounted police barriers on the Manso main road, it has done little to wade off these robbers. The few local miners who worked with the Chinese in the area sees robbery as the reason the Chinese kept in their possession rifles.

5.2.8 People’s Perception about *Galamsey*

Perception is what drives most of the unemployed youth to engage in the activity. The ‘get-rich-quick’ branding of *galamsey* is one of the highest pull-factors associated with the activity. *Galamsey* operators are perceived by the society as rich people and they are easily made to be the financial heads of their various rural families. The high earning nature of the activity has seen many of the young people operating in *galamsey* to live extravagant lifestyles. Kwaku Seedorf, who was once a *galamsey* operator for two years, narrated how deceptive this perception of making quick money has become very rooted in the minds of the

youth. “*When a close friend told me about how easy it is to make big money in galamsey, I jumped on it. For two years, all I could make was being able to cover my daily living expenses*” (Fieldwork Interview July 2013). Many of the ‘seasonal’ galamsey operators shared his views about the illusive and misleading nature of galamsey.

A proverbial Kusi Fosu, a *galamsey* operator, shared a similar opinion about the activity even though he has been almost completing his house after a year in *galamsey*. He stressed on how extremely difficult it is to succeed financially when you do not have the right connections with those at the top of the hierarchy. The mentality of *galamsey* operators towards seeking other means of earning an income is very distant. Although they are willing to quit working on such an extremely physical job, most of them are looking for livelihood approaches that will earn them as much as gold mining does. With their low educational background, the possibility of finding such ventures is unlikely.

5.2.9 How Important is the Activity to the Local Economy?

Small-scale mining could be a huge part of Ghana’s economic growth, yet not much has been done to bring *galamsey* operators on board in order to regularise their work. The legalization of small-scale gold mining has escalated ASM activities, thus providing direct and indirect employment to over one million people and playing a significant role in the economy of Ghana. For those who are lucky enough to find more gold, it is a quick way of earning substantial income and securing a good livelihood. The type of vehicles and houses these illegal miners possess is comparable to the ones in the big cities in Ghana. *Galamsey* is seen by many people living in Manso as one of the few coping strategies employed by people to master, tolerate or minimize the adverse effects of economic hardships. It therefore serves as a source of livelihood where those engaging can make huge earning that does not only provide food and shelter but can give them the kind of lifestyle they want.

Figure 4. The previous shelter of a gamamsey operator



Source: Fieldwork 17/07/2013

Figure 5. The previous shelter of a gamamsey operator



Source: Fieldwork 17/07/2013

Kusi Fosu showed where he has lived for 6years (*photo 1*), and within a year of intense gold winning activities, he is just about completing his 5 bedroom house in Manso Assamang (*Photo 2*). The activity, although proved to be a solid financial starting point for most of the youth but at the same time, is putting the works of the legal small-scale miner in difficulty. Miners who are working for some legal small-scale companies and acquired mining knowledge also work as *galamsey* operators on their free time. Small-scale owners in the Manso area raised concerns over this development. Considering the number of people living in the community, very few people enjoyed the huge economic benefits of the activity.

5.3 Reasons Behind the Continual Spread of the Activity

There is little doubt about the immediate economic impact of small-scale gold mining in Ghana. This activity creates employment avenues for several thousands of local Ghanaians. Most of the daily commercial functions of communities where illegal gold mining is widespread revolve around the progress of the activity. Market women, gas station operators, call credit vendors, food and water sellers, automobile mechanics, taxi drivers and building construction workers benefits directly and indirectly from the activity. However, these positive impacts have been clouded by extreme environmental damages done to rivers, streams, forest and farmlands. For this reason, the government is pulling resources together in order to halt the activity but faces enormous task in doing so. The disorganised nature of the activity has made it almost impossible to end illegal gold mining. For those who are not directly involved in the activity but benefit greatly from it, have also made it extremely difficult to disunite people indulging in *galamsey*. The head teacher in one of the district's high schools shares his opinion on why the activity keeps spreading.

When they are introduced to galamsey, they make huge sums of money and it is difficult to stop once they start enjoying their excessive life-styles. The youth in this community after completing high school, have to start a new life for themselves. They are impatient with how long it takes them to gain money in farming. Galamsey is the easy way out (Fieldwork interview, July 2013).

Many *galamsey* operators, fully aware that their operations are illegal, argue that mining has been their traditional way of life. This activity requires a lot of physical work so most of the people indulging directly in *galamsey* are the youth. The job requires no education, experience or qualification. The root causes of why people are enticed to work as illegal miners are a mix of social and economic reasons. Most young people in Ghana, especially those living in the often-neglected rural areas that are without a job and as a result find it very difficult to secure a livelihood, are easily persuaded by the ‘quick-money’ nature of the activity.

Galamsey today carries a social status among the local Ghanaians. People working as *Galamsey* miners are often identified as rich and they command some level of reputation in the communities they live. However, poverty is seen as major reason why people are lured to the activity. The quick remuneration nature of the job has made it more attractive to most people, usually the unemployed and people working on jobs that produce minimal returns. For investors, it has been a safe haven where they can bypass the huge taxes associated with other ventures although this is a high-risk activity. These somewhat powerful investors have fuelled the spread of the activity. Bongo and Seedorf shared a similar view on why the *galamsey* might never be eliminated.

If you have high-ranking government officials and Members of Parliament who own several concessions, how are you going to stop galamsey activities? These are the very people who are supposed to protect our land and rivers but because of their selfish interest and greed, they engage in heavy galamsey operations (Fieldwork interview, July 2013).

An administrative staff of Gold-line Mines also expressed his views on the issue of why it is for the government to curb their actions.

There is a whole chain of people involved in galamsey. The actual miners are just the visible ones who for lack of employment opportunities, gets into the activity. The real problem is finding those who finance their operations. This is a venture that requires roughly US\$ 200,000 to start. Let us be honest, very few Ghanaians can afford such a budget in a risky business (Fieldwork interview, July 2013).

These two assertions demonstrate that, there are far more influential groups of individuals such as politicians, traditional chiefs, opinion leaders and security officials have vested interest in the activity.

5.4 The Actors in Ghana *Galamsey*

Every institution or group consist of actors who make decisions at different stages of a chain of command, where each stage possesses some amount of power in influencing the actions of other stages. In the actions of *galamsey* operators, their work is also organised with decisions being made by various actors at different levels within the activity. Actors, as defined within my scope of study, are different groups of people or individuals who share a common interest but with different levels of control and authority. Although distribution of power varies considerably within the organisation, their actions are geared towards a collective goal.

5.4.1 Investors

In the illegal mining business, investors are the individuals and groups that practically finance the whole operation. With the face of *galamsey* activities changing, the need for funding has become a major part of the activity. Investors, both living in Ghana and abroad provide the financial resources to kick-start any operation. With landowners fully aware of the earnings *galamsey* operators can

reap, now demands for huge sums of money before giving away their lands for such operations. Land could cost as much as US\$ 50,000, which the average illegal miner cannot afford. Families who hold lands that possess gold and would want to pull resource together and start their own *galamsey* operations are unable to do so because of other huge operational cost. For example, it costs US\$ 850 to hire an excavator each day to maul the land. Most of these mining sites have excavators resting on the area for months.

Since the activity has moved from poverty-driven to a huge business with massive profit returns within its circles, there has been the need for private investors. It is difficult to identify some investors who help fund the massive financial obligations associated with the new phase of the mining business. It remains much of a hidden secret who these investors are but information I gathered from one mining site in Manso revealed that these investors are not just local wealthy Ghanaians or foreign nationals from China. Some of these investors are Ghanaians living abroad, Nigerians, South Africans, Russians and Americans. They are either businesspersons or politicians with both formal and informal connections with government authorities. Due to the unlawful and risky nature of the activity coupled with the fear of being caught in the operation, these investors have to use middlemen as the link between them and the Precious Mineral Marketing Company, the body responsible for purchasing small-scale gold production. Investors also hire operation managers to supervise the daily activities on their mining sites. Operation managers are used as the bridge between investors and the actual miners on the ground.

5.4.2 Middlemen

The role of intermediaries, who function as the marketing unit of the business is another very important part that is largely ignored. The illegal gold business has attracted people from other businesses such as timber, cocoa, and the imports and exports industry, which have been known down the years to rely on the services

of highly connected intermediaries. These intermediaries do not necessarily have the experience within the mining industry, but they do hold strong connections to influence decisions both at the local level as well as at the national level. The illegal nature associated with the activity has made the role played by intermediaries very important in the operations. At the end of the day, the gold has to find its way to the formal market and middlemen are the ones that get the job done. Because of their illegal identity, *galamsey* groups adopt a very informal approach to their work and are generally difficult to track down (MMSD 2002). These middlemen do not only serve as the marketing unit of the activity but they are also the bridge between license holders and investors. Since getting a license to operate as a small-scale miner involves extensive bureaucratic procedures, middlemen search for small-scale miners who already possess the license to a concession and then use their documents to purchase lands. Middlemen get investors to finance the operation of an acquired mining site, and then the rest of the job remains under the supervision of an operations manager who gets miners from all across the country to come and do the physical aspects of the job.

5.4.3 Operation Managers

Operation managers are the closest of superiors the *galamsey* operators readily recognises. They supervise the daily activities on the mining sites. Operation managers are the ones miners usually regard as the investors or owners of the concessions. One major reason why operation managers are also an important part of the activity is how they are able to get access to mercury. The use of mercury is an important process in *galamsey* operations but it can only be bought from an authorised agent. Under the Mercury Act in Ghana's mining laws, any person who imports any quantity of mercury into the country or has in his possession or buys, sell or transfer any mercury shall be guilty of an offence and will be liable to a fine of GHC 200, (equivalent to US\$ 90) or face a prison sentence not exceeding two years. They are usually experienced in the field and the nature of the *galamsey* operation requires such familiarity with how work is

done on a site. At the end of the day, the miners have a duty to sell all the gold they were able to mine to the operations manager. They are responsible for the daily activities on the mining sites and they are only accountable to some unknown private investors who could be anyone at anywhere.

5.4.4 Local Miners

The actual groundwork requires the combined effort of several miners. Depending on the size of the concession and how rumours of the gold discovery in a particular community have spread across the region, there could be several hundreds of people coming to work on the site. During a field survey I made on a mining site in Manso Assamang, close to 200 miners could be spotted busily working with simple tools under harsh conditions. Kofi Tawiah, an operations manager revealed that, on a peak day, there could be over 800 people on a particular site, all working on several different tasks. These people were mostly young abled men, middle-aged women and in some cases, children who looked very strong. Another observation that characterized the miners was the different types of mining they indulge in.

5.4.5 Women and Children in *Galamsey*

Women in *galamsey* earn much less compared to the men. They usually carry the mud and stones in sacks from the one side of the mining area to where the gold is extracted. Depending on the distance and the load, each sack cost between 2–3 cedis (equivalent to US\$ 1). They do not need to be employed by any *galamsey* operation manager. Most of these women are subsistence farmers who earn income by selling off their produce. In areas where the women work in groups (usually 5-10 people), they are tasked to load a truck or send stones to the extraction site. Most of these women admit the work takes a toll of their health; however, they are quick to choose *galamsey* over farming because of the high earnings associated with mining. The high earnings in the activity have also come at the expense of their health. They also raised concerns how their children

are lured into the activity. Most of the women who were engaging in *galamsey* have children. Children are usually introduced to the activity by their peers and not by their parents. The children earn close to what their mothers receive for carrying loads. There are also children working in underground mines. Some tunnels are very steep and narrow that children are lured to enter and chisel through it. One disturbing act most parents were not aware was the kind of tunnels their children have to manoeuvre through.

Even though I am 16 years, I help my mom and two sisters. This job has been a good source of income for us since my dad passed away. However, my mom has no idea what kind of tunnels I have to enter and search for gold. I think she will collapse if she gets to see this tunnel (Fieldwork Interview July 2013)

However, looking at the earnings these children can make in a day, most parents do not bother to ask them the nature of the job they do.

5.5 The ‘Who Gets What’?

An interesting aspect of the activity is the ‘who gets what’ situation of the operation. The work of *galamsey* operators and how much they bring to the table has been very evident for various stakeholders who are directly and indirectly involved. In Manso, where illegal mining was the dominant livelihood strategy, most of the community’s daily social and economic activities depended heavily on the illegal miners. Power relations play an important role at this point of ‘who gets what’. At the end, those at the top of the *galamsey* hierarchy get most of the proceeds, which comes at the expense of the physical efforts put up by the actual miners. The issue of ‘who gets what’ manifests itself in what goes into the activity. Much of the daily operations of the activity mainly depend on the miners but there are quite a lot of background works that goes into the activity. Bongo, a *galamsey* operator who has been working for three years gave a detailed description of what goes into the activity.

There is a license holder, who has a mining permit on one or two concessions. That is the top level and these concession owners are usually famous businessmen, politicians and local chiefs. We the workers do not have any personal contacts with them and we do not know who they are. These investors hire someone who has some extensive knowledge about galamsey activities to oversee the daily operations. They could be family members, a friend or middlemen they can trust. Almost everything that is in and around the mining site runs through these recruited operations manager (Fieldwork interview: Galamsey operator, 15 July 2013).

Although illegal mining has no organised hierarchy but the activity like any corporation or business is organised with decision making at various stages of the operations. The top of the hierarchy decides on when to sell and hoard the gold. The respondent did not really see middlemen as a huge part of the whole process when I quizzed him their role in the activity. The miners, like many other *galamsey* operators, direct their focus towards mining, processing and then selling the gold to the operations manager. How the gold gets to the formal market is entirely out of their concern. This is the point where middlemen become the single most important piece of the whole activity; selling the gold to the Precious Mineral Marketing Company or occasionally smuggling it to external markets outside the boundaries of Ghana. ”

5.5.1 The Different Types of Illegal Miners and How They Operate

There are mainly two types of *galamsey* activities in the mining communities. The most popular one is the ‘*dig and wash*’, where the miners use a lot of water to wash away the mud and sand they dig. The presence of heavy equipment such as excavators and crushing machines is evident at these sites. The land is first grinded with an excavator, and then the men will be able to use axe, shovel to dig whiles the women wash the mud of sand and stones with a tapped water source nearby. The survival of the mining pit depends on the amount of water it holds on the surface. The more they empty these waterlogged areas within the working

away, the less likely the area might cave in. Although their work is dependent on water, heavy rainfall impedes the progress of their work in most cases. The Chinese miners use heavy and sophisticated machines to practise this type of gold mining on a higher scale.

Most of the local migrating miners are usually from the Northern parts of the country, which happens to be three poorest regions in Ghana. Occasionally, miners from neighbouring countries such as Togo, Ivory Coast and Nigeria come in groups and join forces with the local miners though they are usually with no mining experience. Endurance and physical strength rather than experience are crucial in being hired to work with any group of miners who *dig and wash*. Every miner has a specific task during working hours.

Women and children also play an important part at the mining sites. Women usually have the task of carrying sand and mud from one place to the other and children are responsible for emptying less threatening waterlogged areas. At Manso Assamang, where there are several mining sites, one could clearly see the massive number of people doing different task at the same time. However, it is difficult to interview miners who operate under the *dig and wash* system. They are the ones who usually experience the harsh realities of the government's crackdown measures.

Figure 6. A few galamsey miners working on an abandoned board



Source: Fieldwork 18/07/2013

Another type of illegal gold mining is when miners dig out tunnels as deep as 30 feet underground in search for gold. There is no specific name for this type of underground tunnel activity but the miners have different ways of saying they are working in underground tunnels. It is typically dominated by local youth who were either residents living in the communities where the activity is taking place or living in surrounding villages where as the *dig and wash* method is dominated largely by seasonal miners who move from one mining centre to another throughout the year. This type of illegal mining is perhaps the oldest form of *galamsey* as it was the one practised before the colonial period. It requires some level of experience before one could conveniently engage in it. Usually, when new recruits were initiated into the activity, there was the need to pacify the gods before they can start digging their own tunnels. With this type of gold mining,

the execution of the work depends on two or three miners and it could take months before discovering the precious mineral.

Figure 7. A galamsey operator coming out of an underground tunnel



Source: Fieldwork 18/07/2013.

5.5.2 The Characteristics of the Two Illegal Mining Types

There are some unique features associated with the two types of *galamsey* activities. However, the miners who operate the *dig and wash* type can also have their own underground tunnel and vice versa. Table 4 shows how the two mining type differ from each other. The miners who worked in underground tunnels earn more than those who work as *dig and wash* miners. The underground miners usually own the tunnel they have dug out where as the other miners are paid by an operations manager based on how much gold they can find. It is easier to find the *dig and wash* miners because they are more visible but it is difficult to talk to them because of how the government taskforce have reacted toward them. On the

other side, it is extremely difficult to locate the underground miners but they are more open for discussion about the nature of their work. The success of the *dig and wash* type depends more on strength and physique whereas one will need some level of mining experience before opting to be an underground miner

Table 4. The Two Types of Galamsey Operators

	(Dig & Wash Type)	(Underground Tunnels)
Operational Hours	8 hours in the day 6 hours in the night	Anytime during the day. No night shift
Income Received	US\$5-15 per day US\$10-15 per night	US\$ 20 - 40 each day
Number of Miners	(15–30 washing boards) 4-5 miners on each board	2-3 Miners for each underground tunnel
Equipment Used	Excavator, water pumps, and Crushing machines	Axe, Chisel, Shovel, and Sledge Hammer.
Level of Experience	No experience is required	Some level of experience
Area of Coverage	4-6 hectares	1-2 acres

Source: Fieldwork observation and interview, July 2013

5.5.3 Comparing the Different Mining Operators in Ghana

The mining laws of Ghana separate large-scale operations from small-scale activities but it regards both local and Chinese *galamsey* mining as illegal. In comparing the various mining activities in the country, one will have to look more into the scope and scale of the operations. The comparisons made in *table 5*

differentiate between four types of gold mining in Ghana; the large-scale, the legal small-scale, and the two versions of illegal mining (local and Chinese *galamsey*). More emphasis is placed on their share of production, capital required and the source of such investment, equipment used, number of workers, technical expertise and the type of mining methods they employ.

Table 5. Comparison of all the Various Mining Types in Ghana

	Large-Scale	Small-Scale	(<i>Galamsey</i>)	Chinese Miners
Example	Anglo Gold Ashanti	Mpontuo Mining Limited	Kofi Tawiah's Concession Site	Mr Yang's Description
Concession	28000 acres	25 acres	1-5 acres	10-30 acres
Capital Required	US\$700 million	\$50,000 - \$200,000	\$70,000 - \$100,000	\$150,000 - \$500,000
Source of Capital	Public Shares, Stocks	Bank loans, Partnership	Investors who are largely unknown	Loans, Family savings, Partners
Mining Techniques	Modern, refined mining	Cultured but alluvial mining	Dig and Wash, Tunnel Digging	Alluvial mining
Number of Workers	7000 employees	30 - 100 employees	50 - 400 miners	5 - 20 Chinese
Technical Personnel	Experts	Semi-Professional	Open to all	Experienced Miners
Type of Equipment	Excavator, Tractors,	Caterpillars, Stone Crushers	Shovel, Pickaxe, Chisel, Hammer	Excavators, Stone Crushers

Sources: The AngloGold Ashanti Integrated Report on Continental Africa (2012) and Fieldwork interview (15 July 2013)

Table 5 above indicates how the large-scale mining is much different from the three other mining types, which are largely similar in terms of mining techniques, machines, personnel and their size of operation. However, with the face of *galamsey* changing, these artisanal miners especially the Chinese are gradually getting closer to the required amount of capital needed to start a large-scale operation. Data gathered by the miners indicates that the Chinese are able to secure loans from China's EXIM Bank and while investors who remain largely unknown finance the local *galamsey* miners. The cost involved for local Ghanaian investors to start the operation is much lower from that of the Chinese. The local investors usually are able to get a good deal on the purchases and rent involved in starting the operation. However, the arrival and departure of the Chinese has brought major changes in the cost of operating especially in the area of land acquisition where concessions for the local people are the same as the prices the Chinese will pay for them.

Table 6. The Local Ghanaian Investor Initial Cost of Operation

ITEMS	AMOUNT (ALL IN US\$)
Land Purchase	20000 – 50000
Excavator (hiring)	600 per day
Driver (salary)	50 per day
Fuel for Equipment	250 per day
'Chanfa' (crushing machine)	50 per day
Mercury	30 per 100grams
Electricity Generator	1000

Source: Fieldwork interview, July 2013

The activity, which traditionally has been a livelihood strategy for the poor has seen significant changes in the last few years. The cost of starting *galamsey* is no longer an operation the local poor can afford. However, with assistance from these unknown investors, the local people can still access some of the livelihood outcomes associated with the activity. The standard of living for the poor has not seen any significant improvement in the Manso community even though some people have gained massive earning on the activity. The rising cost of living in the Manso community have brought up a situation whereby these miners would have to spend most of their earning on food, housing, transportation and mobile telephony usage.

5.6 Chinese Miners; The Game Changers

This section will discuss how the Chinese miners became the game changers in *galamsey* all over the country. Looking back to the years preceding the Chinese arrival, one can attest to the fact that the nature of the activity has changed drastically. I will dig into why the Chinese came into the *galamsey* business and how their introduction has changed in the activity. However, at the time of my field survey, a taskforce of police, military and immigration officials had been setup by the government to stamp out all illegal miners. The taskforce was aggressively carrying out arrest on several other mining sites all across the country with Manso Nkwanta becoming one of their focus areas.

The Chinese brought efficiency to the operations and made the activity a viable area to earn huge margins of profit. Most of these Chinese miners who came to Ghana were from the mountain villages in one of China's poorest regions where most people belong to the Zhuang ethnic minority. It is quite interesting how most of these miners are from a poverty-ridden area, yet they are able to generate the massive financial obligations required to kick-start such an operation in Ghana. Although, they are able to generate funds from personal and family

savings, a large proportion of their capital is acquired from loans at Chinese Banks. This opens up questions on how such huge loans are easily approved for Chinese miners who intend to indulge in the very sector branded as illegal by the Ghana government.

5.6.1 How Did the Chinese Enter the Game?

There had never been a situation where the small-scale sector encountered such a large influx of miners from a foreign country. From the interviews I conducted with some of the operation managers and local *galamsey* miners, a good account was given on how Ghana had faced such a significant number of Chinese miners. Local Ghanaian businesspersons who were engaged in the illegal prospecting of gold and importing consumer goods from China had enticed Chinese nationals to collaborate them in the gold mining business. Mr Yang and ‘Kofi Ghana’ who are Chinese nationals but are engaged in the importation of rice to Ghana asserted that, it was not true that Ghanaians are luring Chinese into the country to practise *galamsey*. They give a clue on how they got to know about how Ghana was huge market for rice imports. It is quite simple with the use of the Internet because with existing search engines, information needed on most businesses and dealings are available.

Some local *galamsey* miners are convinced that most of the Chinese gold financiers were able to employ their fellow Chinese who had already been employed as road construction workers in Ghana. These construction workers have stayed in the country for a period to get an idea of the financial earnings in most commercial ventures. Three different perspectives from different groups are given on how the Chinese got into the activity. Firstly, according to the government officials I interviewed, Ghanaian businessmen who import goods from China may have lured the Chinese into *galamsey*. Secondly, the local *galamsey* miners made a claim on how Chinese nationals employed as construction workers in Ghana were the same people that initially invaded the

activity. Yet, the Chinese entrepreneurs also brought in a third view to which they believed their fellow Chinese came to Ghana because of the easy access to information about businesses, including gold mining and how the activity was made more popular by the world market price for gold were available on the internet.

The Chinese came to Ghana with the intention of starting a legalised form of small-scale gold mining partnership with Ghanaians. It was a partnership that was intended to be mutually beneficial to both parties. The local small-scale miners who had repeatedly been out-muscled by the large-scale companies in areas of land-ownership and concession permits needed financial backing. On the other side, the only way the Chinese could engage in the activity was to collaborate other Ghanaian miners. When the first batch of Chinese came into the country and realised many gold mining activities is done unregulated, they decided to forgo their original partnership objectives and start on their own. They were able to purchase lands from traditional rulers and landowners who were mostly farmers.

Adopting such a strategy, the Chinese were able to avoid the scepticisms that surrounded their partnership with the Ghanaians miners and the bureaucratic networks the legal small-scale mining companies have to pass through. The Chinese miners usually come in groups of 4 to 10 people. These groups have a leader who somewhat has some experience in working in a Ghanaian mine. The rest of the group will later familiarise themselves with how to operation a *galamsey* concession from the leader. After 2 to 3 months, they return to China and these apprentices become bosses of their own who will then come back to Ghana with a new group of trainees. Hence, through these master groups, several thousands of Chinese miners overran the gold mining industry in a short period. This opens up the question of how they could afford the huge financial requirement necessary to kick-start on their own. Although the gold industry was

booming at that time, they cannot just afford to start their own operation after 2-3 months of working as apprentices. Data gathered from the small-scale miners revealed that China's EXIM Bank was funding the Chinese miners through low interest loans. The type of excavators and brand-new equipment they were purchasing made the local Ghanaian miners wondered whether reports about the Chinese miners being financed by China's biggest bank were true.

Table 7. Cost Incurred by the Chinese to Start the Galamsey

CATEGORIES	AMOUNT (US \$)
Land Concession	25,000 – 50,000
Traditional authorities share	500 per month
Compensation to local farmers	More than 20 times the value of the crops
Immigration Processing	4,000 including visa brokers charges
Salary for Chinese workers	1,500 – 2,000 per month
Cost of Machinery;	100,000 - 200,000

Source: Fieldtrip Interview with Mr Yang, July 2013

5.6.2 The Success of the Chinese Operations

Ghana has been an eye-catching place for miners from China than any other country since the beginning of 2010. The several hundreds of Chinese miners seeking for visas to Ghana is a manifestation of how successful and profitable the activity has become. The success of their operations depends on several factors. Finding the root causes of how the Chinese miners operated successfully is difficult. Immigrations authorities, ports and harbour officials, police, traditional chiefs, farmers and landowners have a part to play. Ghana immigration authority

has deported close to 5,000 Chinese miners but the question remains how they got into the country. One immigration official working at the Kotoka airport in Accra stated that it got to a point where every flight landing in Ghana had about 20 Chinese on-board. When it became increasingly difficult for the Chinese to acquire a visa to Ghana, they diverted to securing visas to neighbouring countries such as Togo and Burkina Faso. They are able to secure their passage to Ghana through bribery at checkpoints. Once they are in Ghana, they meet up with their colleagues who in turn take them to the community. Kusi Fosu narrated how he first met the Chinese.

They do not trust anybody except their Chinese counterparts, they live in the forest but they can assess electricity and clean water. They bring in food that can last for 6 months, vehicles, safe boxes, guns, blankets, beds... With the kind of money the Chinese possessed, farmers and landowner must be insane if they say no to them. They arrive with excavators, crushing machines, water pumps, generators, trucks and everything they need to reap huge profits. They could build artificial barriers near rivers and channel it down to the mining sites. The Chinese were serious! (Fieldwork Interview July 2013).

The Chinese sold their gold to the PMMC and other jewellery shops in Ghana. The PMMC was the same body buying off the gold. Many underground dealings take place in the purchase of gold from small-scale miners. Once you get into the ‘back door system’ at the company, you can easily sell off your product.

Kwasi Danquah, a licensed small-scale operator when asked about the economic troubles the Chinese operators posed to his *galamsey* work stated that, “*Gold mined today in Manso by galamsey people can easily become a wedding ring tomorrow in Kumasi*” (Fieldwork interview, July 2013). Although, gold price at the world market was soaring, local small-scale miners could not use the global prices on the local market because of the massive deliveries gold buyers were getting from the Chinese miners. There are several Chinese citizens operating foreign bank accounts in the country, which they used to transfer money when

they sell the gold. It is risky for the Chinese to smuggle gold out of Ghana and therefore they opt to sell their gold in the country. Language seems to be the only obstacle the Chinese faced in the pursuit of their business. They soon started opening shops to sell spare parts for their heavy machines.

One unique feature on the Chinese activities in Ghana was their perception about how the local people were not friendly. You will hardly see a Chinese citizen walking in the streets even they are engaging in other ventures beside *galamsey*. The Chinese miners always come with their containers fully loaded and they settle in the forests close to the mines. They use the ‘*chanfa*’ (a Chinese made stone-crushing machine) to generate electricity and they use all kinds of electrical appliances. They only come to the cities when they needed to sell off their gold, buy foodstuffs, or exchange foreign currency.

Figure 8. A typical bedroom for Chinese miners



Source: Agence France-Presse (2014)

The Chinese *galamsey* was very different from the local version of the activity. Almost everything was mechanised. It was easy for 4 or 5 Chinese to do the kind of job that required over 100 local people to do. The Chinese were well prepared and knew how to make huge profits within a short period of time. Before the arrival of the Chinese, local miners could stay and mine on a given land for well over a year. The heavy machinery introduced by the Chinese has made mining lands become useless after 1-2 months.

Ghana's illegal gold mining communities are usually areas that are deprived from the 'national cake'. These areas have inaccessible roads; electricity power outages and less media coverage have made it difficult to trace gold business. In the legal large scale mining communities, where illegal miners still operate around concessions of big mining companies, the lack of traceability in the Ghanaian legal gold supply chain opens gaps for an easy laundering of illegal gold.

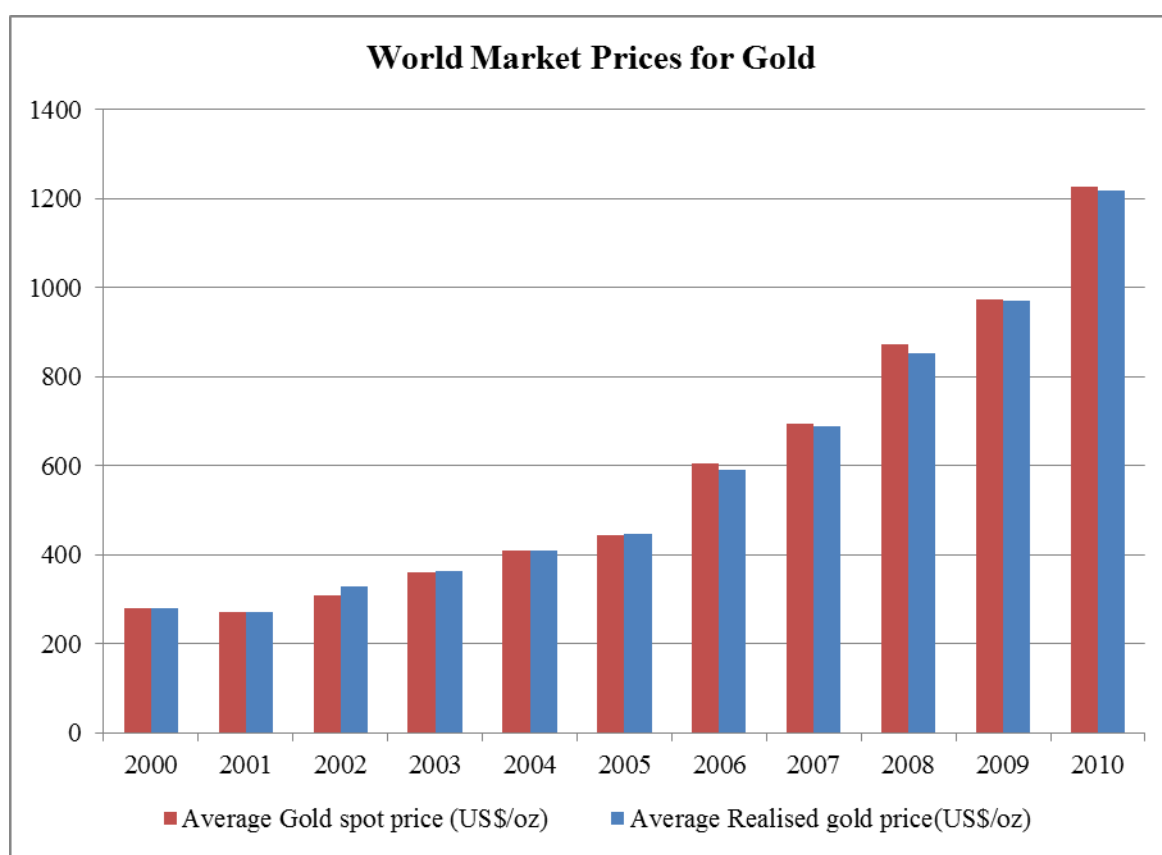
5.6.3 The Influence of Gold Prices

Gold mining activities during the last 10 years has become increasingly attractive due to rising world market prices for the precious mineral (Hammond et al. 2007). A focus group discussion with seven miners gave the indication that gold prices on the world market were one of the key factors why several thousands of Chinese came to Ghana. Not only did gold prices pushed more Chinese to the activity, it also made *galamsey* much popular. When one looks at the trend of gold prices on the chart below, it indicates how the prices has enjoyed a steady increase from 2002 up to 2010 when the Chinese invaded Ghana's gold mining sector. The prices continued to increase rapidly in the face of the global economic turmoil.

A local radio presenter was convinced that Ghana will always face foreign intrusion and a mad rush for gold whenever prices surge on the world market.

However, one jewellery shop owner living in Kumasi who buys gold from Chinese miners did not agree to the assertion that gold prices influenced people from China to indulge in illegal activity. She expressed that *“the gold mining business is such that you cannot trust it 100 per cent because prices can go up or down at any time”* (Fieldwork Interview July 2013). With that assertion, not so many people will commit themselves to such a risky venture. Although the high gold prices have made the activity much popular and attractive, the Chinese realised the flaws of Ghana’s mining and immigration laws and security position.

Figure 9. A Graph Showing the World Market Prices for Gold



Source: Ghana Chamber of Mines (2011).

Figure 4 gives an indication of how gold prices at the world market kept on increasing. The popularity of the activity has pushed the country to face an influx of both local and foreign illegal small-scale miners as world market price for gold kept on rising in the middle of economic uncertainty among Western

countries. For example, on 20 April 2011, the global market price of gold reached a new world record of US\$ 1,500 per ounce, a rise of almost 600 per cent from its previous value of US\$ 256 a decade earlier (Tutu 2011). It should be noted that gold prices fluctuates and could drop or increase significantly in the course of time. In the situation where gold prices are falling, several thousands of people are still lured to the activity as they hold onto their precious asset without selling until the value of gold rises again.

5.6.4 The Scale of the Chinese Operation

Assessing the magnitude of the gold mining operations the Chinese carried out is challenging to measure. Most of the Chinese engagements had gone undocumented but their dealings with jewellery shops in Kumasi gives an indication of how vast the size of their mining turned out to be. The Chinese miners introduced the use of sophisticated equipment such as excavators and heavy stone-crushing machines that were comparable to the equipment used by the large-scale firms in their daily operations.

Figure 10. Seized Chinese excavators at Manso



Source: Fieldwork 17/07/2013.

The use of excavators and huge stone grinding machines has become a key part of the successful operation carried out by the Chinese. How do people hire excavators from private owners? Data gathered from one private hiring company in the Ashanti region seem to point to the fact that excavator owners are not interested in what these machines are used for as long as they make huge profits from hiring. There is usually no background check done on why the excavator is being rented. However, the Chinese did not hire excavators as much as the local miners did. The Chinese miners always came well-organised as they usually purchase their own excavators and other equipment needed for the success of their operation.

The arrival of the Chinese have not only changed the way *galamsey* operations are carried out, it has also open up the loose-ends of Ghana's immigration policies and the security flaws in the country's ports and harbour. The Chinese have shown the way for the local people to use efficient approaches in their quest of finding gold. Those who will be able to effectively adopt the Chinese method of *galamsey* are guaranteed of huge profit returns but this will also come at the expense of farmlands and destruction of water bodies. On the other hand, with the departure of the Chinese, how will the government deal with the local *galamsey* miners who have now been exposed to a new way of subsistence mining?

6. CONCLUSION

6.1 Major Findings

The objective of this study was to examine the impact of *galamsey* operations on community development and poverty reduction in the Manso Nkwanta district of Ghana. Towards this goal, I have focused on the following three interrelated sub-questions in my study: *What characterises the regulations of the mining sector in Ghana? What has been the impact of galamsey on the livelihoods of the local population? How, and to what extent, has the arrival of the Chinese miners in Ghana changed galamsey activities?*

6.1.1 Regulating the Mining Sector

The study laid out some of the key mineral and mining laws in the country and how these regulations evidently tend to favour the interest of the large-scale corporations. The findings made on the nature of Ghana's mining regulations clearly show how these laws are bias towards small-scale operators in areas of land concession and permits. Although, both the old and new mining laws incorporate the activities of the small-scale sector, they have done little to persuade miners from indulging in illegal operations. It must be said that small-scale mining was integrated in the general mining laws in order to curb the actions of *galamsey* miners who traditionally used to smuggle gold to neighbouring countries. However, a combination of ineffective policies, bureaucratic disorganisations and the politicisation of the sector have seen these regulations having almost no impact in eliminating illegal gold mining even though it has drastically lessen smuggling. With the rising unemployment situation in the country coupled with political parties' drive to win power, little is done in enforcing laws against illegal miners.

The SAP's certainly fuelled the rise of small-scale mining. The mining laws need to revisit the question of why *galamsey* is illegal in the first place. The country's main problem originates from the government's principle of promoting large-scale mining in order to attract more foreign investment. This has, however, come at the expense of the local small-scale industry where the government has exhibited a lack of open interest in promoting the sector. The avoidable delays small-scale miners have to go through in order to acquire a mining permit should be wiped-off before branding an activity that has long been an entrenched tradition of the local people as illegal. With the government lacking the ability to withhold a long-term measure against the miner, there is the need to alter the traditional policy of non-negotiations with *galamsey* operators, and find a common consensus with the *galamsey* operators.

Secondly, there are a lot of conflict surrounding the big mining companies and small-scale miners as a result of the indecisions of the Minerals Commission on issues of land concessions and permit renewals. It has to share responsibility of escalating land competition between the two interest groups. The key challenges facing the subsistence miners have come in the shape of unfair competition with foreign investors, misguided land tenure system, disorganised nature of the sector, bureaucracy in licensing and permit renewals, and influx of foreigners in the small-scale industry. The big mining companies have the ability to persuade the Minerals Commission on land concessions with their huge financial base. These companies have largely failed in their corporate social responsibilities to the communities. Mining communities do not have the ability to effectively negotiate with mining companies. With mining communities in Ghana lacking the ability to pressure the companies on their social responsibility, some of the youth have vented out their frustrations by resorting to *galamsey* and encroaching on lands reserved for large-scale mining companies.

The government alone cannot solve the challenges linked with small-scale operations. There is the need for a unified approach that pulls all dominant stakeholders on board. The issuance of concession has been one of the central roots why *galamsey* still exist. This could be made easier when these miners are brought on board in a structured manner and offered prospective lands that hold economic value.

With most of the old mining laws in PNDL 153 retained in ACT 703, the mining sector needs an all-inclusive review of the regulations regarding both the large and small-scale operations. There will need to deliberate on key issues pertaining the common interest of the sector. The government, together with political parties, civil society groups, traditional institutions, the mining industry and regulatory bodies should review, strengthen and enforce the present regulations on small-scale mining by clearly defining suitable and undesirable mining practises.

6.1.2 Managing the Impact of *Galamsey* for the Poor and Securing Livelihoods

The study find out that, the impact of *galamsey* on livelihoods can both positive and negative outcomes. Even though, income and consumption levels have increased, the high cost of living, the prevailing social vices, and the reduced health have given the activity both positive and negative outcomes. The spread of the activity have also been driven by the rising unemployment situation pertaining in the country. The government has a duty to open up alternative livelihoods strategies. In this study, poverty was largely defined on income levels. The short-term impact of *galamsey* has clearly seen income levels increasing. Higher incomes have meant the local people can afford and access the basic needs of life. However, the long-term effect of the activities will have negative repercussions on the whole community. Small-scale mining can be a great source of employment and income for the poor only when the government

can offer the miners support to their activities. Although, some people have enhanced their living standards through *galamsey*, most of the groups with no direct engagements to the activity have also seen their cost of living rise sharply.

The destructions caused to farmlands and water-bodies will be felt when the activity dwindles in the community. With less gold mining, there will be less income, which will result in a weak purchasing power. The question still remains on how these miners will be able to search for new livelihoods approach with farmlands and rivers destroyed. With most of the findings of this study pointing to the fact that small-scale mining have the potential of impacting positively on the socio-economic development of any community, there is the need to lessen the negative environmental impact that result for the activity in ensuring that there are other means of sustaining livelihoods.

6.1.3 Avoiding Another Foreign Entry

The arrival of the Chinese miners not only changed the nature of the activity from being just a livelihood strategy to a huge profit making business, but it also opened up the country's security situation. The study find out that local small-scale miner cannot compete with any sort of invasion from foreign nationals because of the huge financial backing they can access in their countries. The environmental cost resulting from the Chinese operations cannot easily be quantified. The immigration, ports and harbour authorities who traditionally did not have any direct impact on *galamsey* activities are now key stakeholders. There will always be another possible means for foreigners to flood the small-scale industry again. These new stakeholders will be the key in making sure such a move does not reoccur.

Concessions for subsistence miners could actively be mined for a year but with the introduction of foreign nationals into the activity, concession could easily loose value within a month. This has pushed an activity regarded as a livelihood

for the local poor into the hand of the new investors. The new business nature of the activity will continue to make the activity an effective livelihood approach for the poor. Avoiding another massive influx of foreign nationals in a sector explicitly reserved for the local people will be crucial to making the activity a means of sustaining livelihoods, rather than a profit making venture for the affluent in the society.

6.1.4 The Way Forward

There is little doubt that the regulations of small-scale operation in Ghana have gone a long way to significantly lessen the rate of gold smuggling from the country. But the same legislation has given rise to the incidence of *galamsey* activities. The introduction of a new legislation on small-scale mining will not only change how *galamsey* miners operate but will in the long run address the challenges that come with rural-urban migration. Any new regulation should incorporate a role for traditional institution. The role that traditional chiefs play in land ownership should be given a second look. Chiefs play a very crucial role in the mining sector in the areas of compensation and royalties. They are key players in land acquisitions and ownership but they do not play any effective role in the approval of mining permits. The rural inhabitants generally see them as figures of authority. With the government lacking the resources to address an activity largely unsupervised, chiefs should be assigned key roles in the issuance of concession permits.

Finally, the government should be able to strengthen existing structures such as the security services (especially the police and immigration services), the Minerals Commission, the PMMC and the Environmental Protection Agency in monitoring and safe-guarding both the natural resources and the environment from further unregulated heavy illegal gold mining activities.

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APPENDIX

Appendix I. Interview Summary of Some Key Informants

INFORMANT	TITLE	LOCATION	DATE
Adelaide Owusu-Mensah	PMMC Public Relations Officer	Accra	03.07.2013
<i>Anonymous</i>	Radio Presenter	Kumasi	10.07.2013
<i>Anonymous</i>	Radio Presenter	Amansie West	21.07.2013
Augustine Gyening	Former Ashanti Regional Police Commander	Bosomtwe District	27.07.2013
Emmanuel K. Busia	Head teacher, Anglican School	Nyinahin	09.07.2013
Ernest Okyere	Assistant District Officer, Minerals Commission	Dunkwa	04.07.2013
Fredrick Gyimah	Law Practitioner	Kumasi	16.07.2013
Grace Addo	MP, Amansie West	Accra	02.07.2013
Kofi Poku Manu	Ashanti Regional Minister	Kumasi, Ashanti	25.07.2013
Kofi Sarfo	Director of Education,	Kumasi	26.07.2013

Kantanka	Ashanti Region		
Kojo Bonsu	KMA Chief Executive	Kumasi	24.07.2013
Kwadwo Fosu	Manager, Ice Plus Drinking Water	Kumasi/Manso	10.07.2013
Kwasi Addo-Danquah	Manager, Danquah Mines	Manso	27.07.2013
Leslie Osei Assibey	HR Manager, Goldline Mines Ltd	Amansie West District	15.07.2013
Mrs Oduro Ankrah	Senior Nurse, KATH	Kumasi	01.08.2013
Mrs Sharon Quaye	Marketing Manager, PMMC	Accra	02.07.2013
Nana Baaye Siakwan II	Chief, Akokofe Community	Bosomtwe District	02.08.2013
Nana Baffoe Weakenten	Linguist, Donkoto Community	Nyinahin	09.07.2013
Nana Bi Kusi Appiah	Chief, Manso Nkwanta	Amansie West District	15.07.2013

Appendix II. QUESTIONNAIRES FOR GALAMSEY MINERS

These questions were intended to capture relevant livelihood information at a convenient level of detail. They provided a valuable understanding into the real issues with galamsey and its links with livelihoods.

- Name, Age, Literacy Level
- Who initiates you to the activity?
- How often do you work?
- Do you only mine for gold?
- How do you sell your gold?
- How rewarding is galamsey compared to your previous job?
- How long have you been working as a galamsey operator?
- What will make you quit this job?
- When do you intend to stop operating as a galamsey miner?
- What are some of the health risks you face?
- Who do you think finance these operations
- What are your views on the arrival of the Chinese miners in this community?
- What has changed since the Chinese entered the activity?
- How did the Chinese enter the game?
- In what ways do security personnel impede your operations?
- Why do you believe *galamsey* is not illegal?
- What kind of job do the rich people living in this community do?
- What is the most difficult time of the year and why?
- How expensive is it to live in this community?
- Is there anything else I should know about this activity?

Appendix II. Some Selected Questions for the Elite

These questions were intended to capture relevant livelihood information at a convenient level of detail. They provided a valuable understanding into the real issues with galamsey and what can be done.

- Why are the actions of *galamsey* operators considered illegal?
- What in your opinion is the root cause of the activity?
- How do we check the large-scale mining companies in undertaking their corporate social responsibilities?
- What does the government needs to do in order to curb the activity?
- How did the Chinese got into the operation?
- How can the government incorporate galamsey into the mining regulations?
- Why does the PMMC purchase gold from galamsey operators?
- How can the country avoid another foreign invasion into such a venture?
- What role does your office play in limiting galamsey activities?